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Canada

Evaluation of the Canada-Saskachewan Labour Market Development Agreement

SYNTHESIS REPORT

December 20, 2017

Evaluation Directorate ▸ Strategic and Service Policy Branch

SP-1172-05-18E

Evaluation of the Canada-Saskachewan Labour Market Development Agreement

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PDF
Cat. No.: Em20-94/2018E-PDF
ISBN: 978-0-660-26399-1

ESDC
Cat. No.: SP-1172-05-18E

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Executive Summary

1. Introduction

Employment and Social Development Canada (ESDC) worked jointly with Saskatchewan and 11 other Provinces and Territories (P/Ts) to undertake the 2012-2017 second cycle of the Labour Market Development Agreement (LMDA) evaluation. The first cycle of the LMDA evaluation was carried out between 1998 and 2012 and involved conducting bilateral formative and summative evaluations in all P/Ts. Under the second cycle, the evaluation work consisted of conducting two to three studies per year on the Employment Benefits and Support Measures (EBSMs) similar programming delivered under these agreements. The studies generated evaluation evidence on the effectiveness, efficiency and design/delivery of EBSMs for Canada, for Saskatchewan and for the 11 other P/Ts that opted for a joint evaluation process with Canada.

Under LMDAs, Canada transfers $2.14B in Employment Insurance (EI) Part II funds to P/Ts for the design and delivery of programs and services to help unemployed individuals, mainly those eligible for EI, to find and maintain employment.

Programs and services delivered by Saskatchewan have to correspond to the EBSM categories defined under the EI Act. The following is a short description of the four categories of programs and services examined in the evaluation:

- **Skills Development (Skills Training, including Apprenticeship Training)** helps participants obtain employment skills by giving them financial assistance in order to attend classroom training.
- **Targeted Wage Subsidies** help participants obtain on-the-job work experience by providing employers with a wage subsidy.
- **Self-Employment** provides financial assistance and business planning advice to participants to help them start their own business.
- **Employment Assistance Services (Workforce Development)** such as counselling, job search skills, job placement services, provision of labour market information and case management.

Four additional programs and services are available under the LMDAs: Job Creation Partnerships, Labour Market Partnerships, Research and Innovation and Targeted Earnings Supplements. They were not evaluated as part of this evaluation. The Job Creation Partnerships and Targeted Earnings Supplements programs were not used in Saskatchewan while Labour Market Partnerships and Research and Innovation will be evaluated at a later date.

Table i provides an overview of the share of funding allocated to the four EBSMs examined under the second cycle for LMDA evaluation and the average cost per participant.

Table i. Share of LMDA Funding and Average Cost per Participant in Saskatchewan

Program and Service	Share of Funding 2014-2015	Average Cost Per Participant 2002-2005
Skills Training, including Apprenticeship Training	79%	$5,410
Workforce Development	13%	$336
Self-Employment	1%	$3,542
Targeted Wage Subsidies	-	$5,306
Total	**93%***	-

Sources: EI Monitoring and Assessment Reports 2002-2003 to 2014-2015.
* Note: Labour Market Partnerships represented about 7% of Employment Benefits and Support Measures expenditures in 2014-2015. Targeted Wage Subsidies were not offered in Saskatchewan in 2014-2015.

This report presents a summary of the findings from eight studies produced on Saskatchewan LMDA interventions and participants. Results are presented for active and former EI claimants, as well as for youth (under 30 years old), older workers (55 years old and over) and long-tenured workers[1] when the number of participants was sufficient to conduct quantitative analyses. Active EI claimants are classified as those who were receiving EI benefits at the time of their EBSM participation. Former EI claimants received EI up to three years before starting their EBSM participation.

2. Key Findings

2.1 Effectiveness and Efficiency of EBSMs

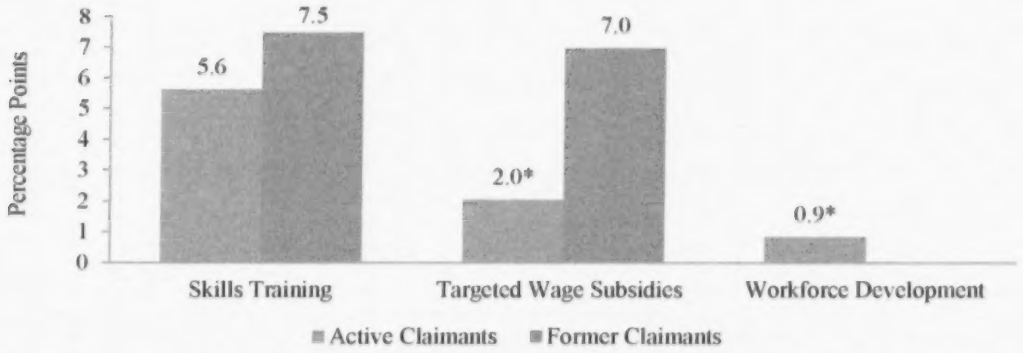
Incremental impacts and cost-benefit analyses addressed EBSM effectiveness and efficiency. Overall, incremental impacts demonstrate that LMDA programs and services are improving the labour market attachment of most participants in Saskatchewan, including youth and older workers. As well, the social benefits of participation exceeded the cost of investment for most interventions over time. Finally, providing Workforce Development services earlier during an EI claim (first four weeks) produced larger impacts on earnings and facilitated participants' earlier return to work. This demonstrates the importance of targeting early participation of EI active claimants.

Figure i presents the incremental impacts on the incidence of employment for active and former claimants by type of program. The estimates can be interpreted as a change in the probability of being employed following participation. For example, participation in Skills Training increases the probability of being employed by 5.6 percentage points for active EI claimants relative to unemployed non-participants.

[1] The long-tenured workers covered in the evaluation are individuals who had long-term attachment to the labour market but not necessarily a long tenure with the same employer.

It is noted that Workforce Development services are relatively modest activities that are, by themselves, not expected to lead to substantial effects on labour market outcomes. In other words, these services aim to support the return to work of unemployed participants and not necessarily to secure better paying or long lasting jobs than pre-participation. However, as demonstrated later in the report, providing Workforce Development services earlier during the EI claim (first four weeks) produced larger impacts on earnings and employment and facilitated earlier returns to work.

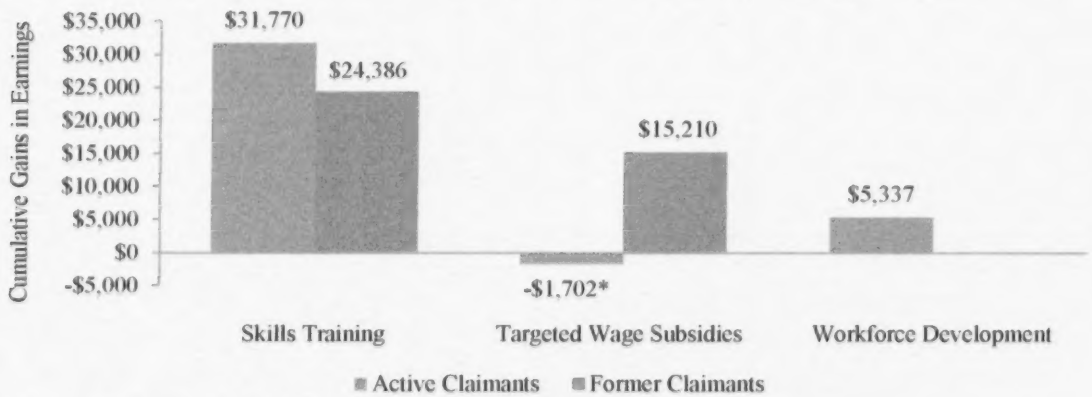
Figure i. Change in Probability of Being Employed in Participants Relative to Non-Participants



*The estimates in Figure i are arithmetic averages of five annual estimates. Active claimants who participated in Targeted Wage Subsidies had an incremental increase in the incidence of employment (4.8 percentage points) in year 1 following participation. Participants in Workforce Development had an incremental increase in the incidence of employment in year 5 following participation (1.6 percentage points).

Figure ii presents the cumulative increase in employment earnings for active and former claimants over the five post-participation years.

Figure ii. Increased Cumulative Earnings of Participants Relative to Non-Participants



*The estimate is not statistically significant at the 95% confidence level.

Table ii presents the number of years required for the social benefits to exceed the program costs. Social benefits to participation exceeded investment costs in a period ranging between the second year of program participation to nearly four years after participation. This excludes those active claimants who participated in Targeted Wage Subsidies, for whom the investment costs may never be recovered. However, active claimants in Targeted Wage Subsidies represented only 1.75% of total participants in 2002-2005.

Table ii. Number of Years for the Benefits to Exceed Program Costs

	Skills Training	Targeted Wage Subsidies	Workforce Development
Active Claimants	3.2	Costs may never be recovered	3.8
Former Claimants	2.4	2nd Year of Participation	

2.2 Main Challenges about EBSM Design and Delivery

Key informant interviews with service providers and program managers, as well as the reviewed documents and questionnaires completed by Saskatchewan representatives, revealed a few challenges about program design and delivery.

Skills Training

- Key informants identified common barriers to employment experienced by Skills Training participants including a lack of work experience/employment opportunities; lack of education; lack of skills or skills not relevant for the current job market; disabilities and mental health issues; and a lack of job readiness.

- As well, key informants identified the following challenges related to Skills Training design and delivery:
    - Lack of awareness of the program and the application process.
    - Applying for Student Loans in most cases can be a cumbersome and frustrating process for some participants.
    - Consultants no longer have a contact from the federal government for inquiries about issues with a participant's EI claim.
    - Lack of funding for childcare.
    - The cost and difficulties of using distance and online learning.

Apprenticeship Training

- Existing literature showed that there is a fairly high non-completion rate among apprentices in Canada (40-50%)[2]. Furthermore, literature revealed that despite the growth in apprenticeship registrations in Canada, there has not been a corresponding increase in

[2] Red Seal. 2014. *Apprenticeship Completion, Certification and Outcomes*. Ottawa: Red Seal.

completions.[3] While available data do not provide reliable information on completion and non-completion rates of participants, key informants interviewed in the evaluation confirmed this trend and identified potential factors that could lead them to drop out of the apprenticeship process. These included:

- Financial constraints.
- Lack of essential skills or academic preparation.
- Employers are unwilling or unable to release their apprentices for training.
- The apprentice realizes that he/she is not suited for the trade selected.
- Social challenges.
- Family issues.

- Other challenges noted by key informants regarding the design and delivery of Apprenticeship Training included:
  - EI benefit waiting period is too long.
  - Communication and planning challenges between the Ministry of the Economy and the Apprenticeship Commission.
  - Lack of support for individuals with learning disabilities and in need of accommodations for training.
  - Lack of funding for essential skills training.
  - Need to make the application system fully electronic.

Workforce Development

- Key informants highlighted a number of challenges with delivering Workforce Development services including:
  - Lack of awareness of the program.
  - Difficulty hiring and keeping skilled and knowledgeable services providers.
  - Difficulties in providing a one-stop-shop for participants.
  - Participants with multiple barriers to employment may require long-term services and multiple programs.

[3] Patrick Coe. 2013. "Apprenticeship Programme Requirements and Apprenticeship Completion Rates in Canada." *Journal of Vocational Education and Training*. 65(4): 575-605

3. Recommendations

A total of four recommendations emerged from the evaluation findings. They are as follows:

- The study on the timing of participation in Workforce Development services showed that receiving assistance early after starting an employment insurance claim can lead to better labour market impacts. As well, key informants reported a lack of awareness about Workforce Development services.
  - *Recommendation 1*: Consideration should be given to providing Saskatchewan with timely access to data on new EI recipients to support targeting and to increase awareness.

- Key informants reported that lack of education, lack of skills or skills not relevant for the current job market are among the common barriers to employment experienced by Skills Training participants. As well, 56% of program funds in 2013-2014 were invested in Adult Basic Education and Essential Skills for the Workplace.
  - *Recommendation 2:* Given the relevance of providing Adult Basic Education and literacy/essential skills training to assist individuals with multiple barriers prepare for vocational training and integrate into the labour market, these interventions should be reported separately from other programs and services, especially Occupational Skills Training, given their unique objectives.

- The evaluation was not able to produce a conclusive assessment of the Self-Employment program effectiveness and efficiency since the data used to assess impacts on earnings may not be the best source of information available to reflect the financial wellbeing of the participants. As well, it is not clear whether the participant's success in improving their labour market attachment through self-employment is more closely associated with their business idea and their entrepreneurship skills rather than the assistance provided under Self-Employment.
  - *Recommendation 3*: Consideration should be given to examine in more detail the design and delivery of the Self-Employment program and whether the performance indicators for this program are appropriate.

- Overall, the LMDA evaluation was able to produce a sound assessment of EBSM effectiveness and efficiency because the team had access to rich data on EI claimants, EBSM participation data and Canada Revenue Agency taxation files. However, some data gaps limited the evaluation's ability to assess how EBSMs operate.
  - *Recommendation 4*: Improvements in the data collection process are recommended to address key program and policy questions of interest to the federal and P/T governments. Specifically:
    - Collect data on whether participants are members of designated groups including Indigenous peoples, persons with disabilities and recent immigrants.
    - Collect data on the type of training funded under Skills Training and the type of assistance provided under Workforce Development. Saskatchewan, ESDC and other P/Ts should work together to define common categories for both EBSMs.
    - Collect detailed data on the cost of interventions.

Management response

Employment and Social Development Canada collaborated with Saskatchewan, as well as other P/Ts, during the planning and implementation of the second cycle of the LMDA evaluation. Saskatchewan is pleased with the evaluation process and agrees with the recommendations articulated in the report. Key actions for addressing the recommendations have been outlined in the management response below.

Recommendation 1: Consideration should be given to providing Saskatchewan with timely access to data on new EI recipients to support targeting and to increase awareness.

Response: Agree.

- Findings from the evaluation indicate that earlier participation in Workforce Development improves participants' labour market outcomes. Providing Saskatchewan with timely access to data on new EI recipients will support targeting and increase awareness of programming.
- Saskatchewan will work with ESDC to implement the Targeting, Referral and Feedback System in Saskatchewan. This will allow Saskatchewan to identify and contact EI applicants early in their claim process so that they can be referred to the appropriate intervention or employment opportunity.

Recommendation 2: Given the relevance of providing Adult Basic Education and literacy/essential skills training to assist individuals with multiple barriers prepare for vocational training and integrate into the labour market, these interventions should be reported separately from other programs and services, especially Occupational Skills Training, given their unique objectives.

Response: Agree.

- Adult Basic Education and literacy/essential skills training have fundamentally different objectives than Occupational Skills Training programs. As such, Saskatchewan agrees that these programs should be reported separately.
- In addition, Saskatchewan will better align programs and services with the Skills Development and Targeted Wage Subsidies categories to inform future evaluations.

Recommendation 3: Consideration should be given to examine in more detail the design and delivery of the Self-Employment program and whether the performance indicators for this program are appropriate.

Response: Agree.

- There is an opportunity to better align program outcomes with performance indicators. This would provide greater clarity on whether participant outcomes are an independent product of program participation rather than their business idea and/or their entrepreneurship skills.

Recommendation 4: Improvements in the data collection process are recommended to address key program and policy questions of interest to the federal and P/T governments. Specifically:

- Collect data on whether participants are members of designated groups including Indigenous peoples, persons with disabilities and recent immigrants.
- Collect data on the type of training funded under Skills Training and the type of assistance provided under Workforce Development. Saskatchewan, ESDC and other P/Ts should work together to define common categories for both EBSMs.
- Collect detailed data on the cost of interventions.

Response: Agree.

- Saskatchewan will work to improve data collection processes so that there is more consistent and fulsome data available for evaluative purposes.
- Saskatchewan will continue to work with other P/Ts and ESDC to build a stronger performance measurement framework for the renewed labour market transfer agreements.
- Saskatchewan supports collection of data on the cost of interventions for the purpose of determining return on investment.

1. Introduction

Employment and Social Development Canada (ESDC) worked jointly with Saskatchewan and 11 other Provinces and Territories (P/Ts) to undertake the 2012-2017 second cycle for the Labour Market Development Agreement (LMDA) evaluations. The first cycle of LMDA evaluation was carried out between 1998 and 2012 and involved conducting bilateral formative and summative evaluations in all P/Ts. Under the second cycle, the evaluation work consisted of conducting two to three studies per year on the Employment Benefits and Support Measures (EBSMs) similar programming delivered under these agreements. The studies generated evaluation evidence on the effectiveness, efficiency and design/delivery of EBSMs for Canada overall, for Saskatchewan and for the 11 other P/Ts that opted for a joint evaluation process with the Government of Canada.

This report presents a summary of the findings from studies conducted for Saskatchewan and it is organised as follows:

- Introduction with an overview of the studies summarized in this report including their scope, methodology, and contextual information on the LMDAs.
- Findings section with a discussion around the rationale for investing in labour market programming and a summary of evaluation evidence.
- Comparison of key findings by program type.
- Conclusions.
- Recommendations that emerge from the evaluation findings.

1.1 Labour Market Development Agreement Background

LMDAs are bilateral agreements between Canada and each P/T, and were established under Part II of the 1996 Employment Insurance Act. As part of these agreements, Canada transfers $2.14B annually in EI Part II funding to the P/Ts in order to design and deliver programs and services to assist individuals prepare for, obtain and maintain employment. Specifically, Saskatchewan receives approximately $35.9M in EBSM funding each year.

The Canada-Saskatchewan LMDA was signed on February 6, 1996. The agreement transferred responsibility for the design and delivery of program and services to Saskatchewan. Programs and services are classified under two categories: 1) Employment Benefits and 2) Support Measures.

Employment Benefits

Employment Benefits funded under the LMDAs are offered to unemployed individuals who 1) are actively on EI (i.e., active claimants); 2) ended their benefit period within three years before participating (i.e., former claimants); or 3) established a claim for maternity or parental benefits

within the past five years and are returning to the labour force for the first time (i.e., former claimants)[4]. Employment benefits include the following categories:

- **Skills Development (Skills Training, including Apprenticeship Training)** helps participants obtain employment skills by giving them financial assistance to enable them to select, arrange and pay for classroom training.
- **Targeted Wage Subsidies** help participants obtain on-the-job work experience by providing employers with financial assistance to help with the wages of participants. The program is not currently offered in Saskatchewan.
- **Self-Employment** provides financial assistance and business planning advice to EI-eligible participants to help them start their own business. This financial assistance is intended to cover personal living expenses and other expenses during the initial stages of the business.
- **Job Creation Partnerships** provides participants with opportunities to gain work experience that will lead to ongoing employment. Employment opportunities are provided by projects that contribute to developing the community and the local economy. The program is not offered in Saskatchewan and therefore not covered by the evaluation.
- **Targeted Earnings Supplements** encourage unemployed persons to accept employment by offering them financial incentives. This program was not offered in Saskatchewan and therefore not covered by the evaluation.

Support Measures

Support Measures are available to all unemployed individuals including those not eligible to receive EI and include:

- **Employment Assistance Services (Workforce Development)** such as individual counselling, action planning, help with job search skills, job-finding clubs, job placement services, the provision of Labour Market Information, case management and follow-up.
- **Labour Market Partnerships** provide funding to help employers, employee and employer associations, and communities improve their capacity to deal with human resource requirements and implement labour force adjustments. These partnerships involve developing plans and strategies, and implementing labour force adjustment measures. This support measure was not covered by the evaluation.
- **Research and Innovation** supports activities that identify better ways of helping people prepare for or keep employment and be productive participants in the labour force. Funds are provided to eligible recipients to enable them to carry out demonstration projects and research for this purpose. This support measure was not covered by the evaluation.

Table 1 provides an overview of the share of funding allocated to the four programs and services examined under the second cycle for LMDA evaluation in Saskatchewan and the average cost per participant. It is noted that the average cost per participant was calculated based on the 2002-2005 data from the EI Monitoring and Assessment Reports. The 2002-2005 period corresponds

[4] Former claimants who received maternity or parental benefits were not covered by the evaluation given the difficulty in finding a suitable comparison group.

to the cohort of participants selected for incremental impacts and cost-benefit analysis in the LMDA evaluation.

Table 1. Share of LMDA Funding and Average Cost per Participant in Saskatchewan

Program and Service	Share of Funding 2014-2015	Average Cost Per Participant 2002-2005
Skills Training (including Apprenticeship Training)	79%	$5,410
Workforce Development	13%	$336
Self-Employment	1%	$3,542
Targeted Wage Subsidies	-	$5,306
Total	**93%***	–

Sources: EI Monitoring and Assessment Reports 2002-2003 to 2014-2015.
* Note: Labour Market Partnerships (not covered by the evaluation) represented about 7% of Employment Benefits and Support Measures expenditures in 2014-2015. Targeted Wage Subsidies were not offered in Saskatchewan in 2014-2015.

1.2 Methodology

This section presents key aspects of the quantitative analyses carried out as part of the LMDA studies, while a more detailed description of the methodology is provided in Appendix A.

All quantitative analyses were based on administrative data from the EI Part I (EI claim data) and Part II (EBSM participation data collected by Saskatchewan and transferred to ESDC) databanks that was linked to T1 and T4 taxation files from the Canada Revenue Agency. Incremental impact analyses and cost-benefit analyses were based on 100% of participants in the reference period selected.

Incremental Impacts Analysis

Five studies assessed program effectiveness by estimating incremental impacts from EBSM participation on participants' labour market experience (e.g., earnings from employment/self-employment, incidence of employment, use of EI or social assistance and dependence on income support) after participation. The role of the incremental impact analysis is to isolate the effects of participation from other factors such as the economic cycle. In order to achieve this, the incremental impact analyses compared the labour market experience of participants before and after their participation with that of non-participants (see the example of incremental impact calculation in Figure 1).

The matching of participants and comparison group members used up to 75 socio-demographic and labour market variables observed over five years before participation. Two different comparison groups were used to measure impacts for active and former EI claimants. For active

claimants, the incremental impacts were measured relative to a comparison group of active claimants who were eligible to participate in EBSMs but did not during the reference period.

Figure 1. Example of Incremental Impact Calculation

Former claimants can be underemployed and unable to requalify for EI, out of the labour force for various reasons or on social assistance. Based on previous evaluation methodologies, on expert advice and given the difficulty in generating a suitable comparison for former claimants using administrative data alone, the comparison group for former claimants was created using individuals who only participated in Workforce Development services during the reference period. This is a conservative approach given the fact that participation in Workforce Development can lead to limited effects on labour market outcomes. In other words, the experience of former claimants who received employment benefits (i.e., Skills Training, Targeted Wage Subsidies and Self-Employment) was compared to the experience of former claimants who received a low intensity employment service (i.e. Workforce Development only). Due to this difference in measurement, incremental impacts estimated for active claimants should not be directly compared to former claimant participants.[5]

When the number of participants was sufficient, incremental impacts were examined for active and former EI claimants who were youth (under 30 years old), older workers (55 years old and over) and long-tenured workers. Long-tenured workers refer to individuals who had long-term attachment to the labour market but not necessarily a long tenure with the same employer.

Factors Accounted for in the Cost-Benefit Analysis

Program efficiency was assessed through a cost-benefit analysis which compared the cost of participating in the program for the participants and the cost of delivering the program for the government to the benefits generated by the program. Overall, this analysis provided insight on the extent to which the program is efficient for society (i.e., for both the participants and the

[5] Full details about the incremental impact methodology can be found in the following report: Stream 1 Study for 2013-2014: National Level Analysis of EBSM Incremental Impacts. Methodology Report. Evaluation Directorate. ESDC. September 16, 2013.

government). The costs and benefits accounted for in the calculations were as follows (see detailed definitions in Appendix A):

- Program costs include program and administration costs paid by the government.
- Marginal social costs of public funds represent the loss incurred by society when raising additional revenues such as taxes to fund government programs.
- Employment earnings consist of incremental impacts on participants' earnings during and after participation. The calculation accounts for the participant's forgone earnings during participation (i.e. opportunity cost). Employment earnings were also increased by 15% to account for fringe benefits such as employer-paid health, life insurance and pension contributions.

Strengths and Limitations of the Studies

One of the key strengths from the studies is that all quantitative analyses were based on administrative data rather than survey responses. Compared to survey data, administrative data are not subject to recall errors or response bias.

The propensity score models used to match participants and non-participants for the incremental impact analyses are judged to be robust in part because they were based on five years of pre-participation data and on a vast array of variables including socio-demographic characteristics, location, skill level related to last occupation and indicators of labour market attachment. Sensitivity analysis and the use of alternative estimation methods have increased confidence in the incremental impact estimates. However, one limitation with the propensity score matching techniques is that no one can be fully sure the impacts were not influenced by factors not captured in the data.

The cost-benefit analysis accounted for all quantifiable costs and benefits that are directly attributable to the EBSMs and that can be estimated with the available administrative data. The analysis did not account for non-quantifiable benefits such as improvements in participant's wellbeing or for the multiplier effect of increased spending on the economy.

It should be noted that it is not possible to produce incremental impacts of apprentices. Assessing these impacts poses a methodological challenge because program participants are already employed and are expected to return to their employment after completing their training. Therefore, expected labour market impacts cannot be examined using a similar approach as for other EBSMs, which are expected to help participants return to employment. As well, the data available does not permit the identification of a proper comparison group since program participants alternate between work and training and no other potential counterfactuals have similar employment and training patterns. In this context, it is possible to provide an analysis of labour market outcomes associated with program participants but not possible to produce estimates of program effectiveness. While outcomes can provide some insights about the labour market experience of participants before and after participation, it is not possible to attribute the change observed in the outcomes to program participation. For example, a change in average annual earnings from before to after participation could be due to program participation or to other factors such as the maturation effect of youth, the economic cycle, lay off, etc.

When interpreting qualitative findings, readers should keep in mind that these are based on the perception of a small number of key informants who are directly involved in the design or delivery of the program. Their perception may be representative of their own region or community but not necessarily of the entire province. Since the number of key informants interviewed in each study is small (i.e. ranging between 4 and 10), the number of informants who reported a specific finding is not indicated in the report. However, the report notes when there is a clear disagreement between key informants.

1.3 Overview of the Studies Summarized in This Report

Findings presented in this report were drawn from eight separate studies produced on Saskatchewan LMDA interventions and participants. These studies examined issues related to EBSM effectiveness, efficiency, and design/delivery and used a mix of qualitative and quantitative methods. Each study examined evaluation issues in relation to active and former EI claimants.

Table G1 in Appendix G presents an overview of these studies, including the type of evidence generated, the methods used, the reference period and the length of the post-program period over which program effects were observed.

2 Evaluation Findings

2.1 Rationale and Labour Market Context

Active labour market programs are fairly similar across the Organization for Economic Co-operation and Development countries and consist of skills training in a classroom setting, work experience with employers (often subsidized) or in the public/non-profit sector, return-to-employment assistance and self-employment assistance. In Saskatchewan, the Ministry of the Economy administers a range of active labour market programming targeted at various groups of individuals. Programs and services offered to active and former EI claimants are primarily funded under the LMDA.

Saskatchewan's Ministry of the Economy's Annual Report for 2015-2016 outlines strategic priorities to meet the labour market needs. These include:

- Align skills provision to the needs of the economy.
- Engage under-represented groups in the Saskatchewan workforce.
- Attract skilled workers to the province[6].

Overall, incremental impacts reported in the LMDA evaluation and discussed in this report, especially those related to the Skills Training, demonstrated that LMDA funded programs and services delivered in Saskatchewan are generally helping participants improve their labour market experience after participation and contribute to meeting some of the Ministry of the Economy's key priorities.

[6] Government of Saskatchewan. *Annual Report for 2015-2016*. Ministry of the Economy. 2016

2.2 Skills Training

2.2.1 Program Description

Based on a document review and four key informant interviews completed in the summer of 2015

Skills Training assists active and former EI claimants obtain the skills they need for employment. Program funding provides training to unemployed individuals that meets the needs of the local labour market and results in sustainable labour market attachment.

The following financial supports are provided under the program:

- Tuition and student registration fees.
- Books, equipment and other costs required to take the training.
- Dependent care/childcare.
- Transportation.
- Special equipment for persons with disabilities.
- Provincial training allowance (living allowance).

Participants are required to contribute towards their studies and the amount varies depending on the resources available to the participant (income, assets, spouse's income). Participants are also required to apply for student loans to support their training.

Training supported under the Skills Training program (see Table 2) includes:

- Occupational Skills Training such as licensed practical nursing, class 4 power engineering and special care aids.
- Adult Basic Education interventions (such as grade 11 and 12 upgrading).
- Essential Skills for the Workplace (such as computer use, writing skills, and oral communication).

Table 2. Type of Training Supported under Skills Training

Type of Training	Percent of Interventions
Occupational Skills Training	44%
Adult Basic Education	35%
Essential Skills for the Workplace	21%

Source: Information submitted by the Ministry of Economy

Skills Training courses can be classroom based, online, or on-the-job. Training can be delivered at colleges, but university degrees are not supported under the program. The duration of training varies depending on the training program; however, key informants reported that the maximum duration of the training ranges from 2 to 3 years in length.

2.2.2 Program Delivery

As part of the case management process, participants are required to undertake labour market research on their chosen training program and occupation. Participants can access labour market information through the SaskJobs website. They also conduct informational interviews with potential employers. The labour market information must demonstrate that sufficient demand exists for the occupation associated with the participant's chosen training program. Consultants may also discuss local labour market demand and provide the participant with labour market information to help inform their training choice. The Ministry of the Economy has a labour market information unit which determines occupations in demand and provides this information to consultants.

Skills Training participants are monitored during participation. The frequency of the monitoring depends on the length of training. Consultants contact participants to see how they are progressing, and also maintain a close relationship with training institutions. Participants are contacted again at 60 and 90 days after the completion of training. As well, a follow-up survey is conducted with Adult Basic Education participants 3 months after the completion of training.

2.2.3 Profile of Skills Training Participants

As shown in Table B1 in Appendix B, the majority of active claimants who started their Skills Training intervention between 2002 and 2005 were male (54%) whereas the 2006-2008 cohort of participants were evenly divided between males and female (50% each). As well, the majority of participants in both cohorts were 34 years old and younger (64% and 55% respectively). Participants in Skills Training most frequently held occupations requiring secondary or occupational training in the year prior to participation (41% for the 2002-2005 cohort and 43% for the 2006-2008 cohort).

Former claimants who started their Skills Training participation in the 2002-2005 and 2006-2008 periods were mainly female (57% and 61% respectively). The majority of 2002-2005 participants were between 25 to 44 years of age (63%) while 2006-2008 participants were mainly 34 years old and younger (64%). Participants in both cohorts most frequently held occupations requiring secondary or occupational training before participation (40% each).

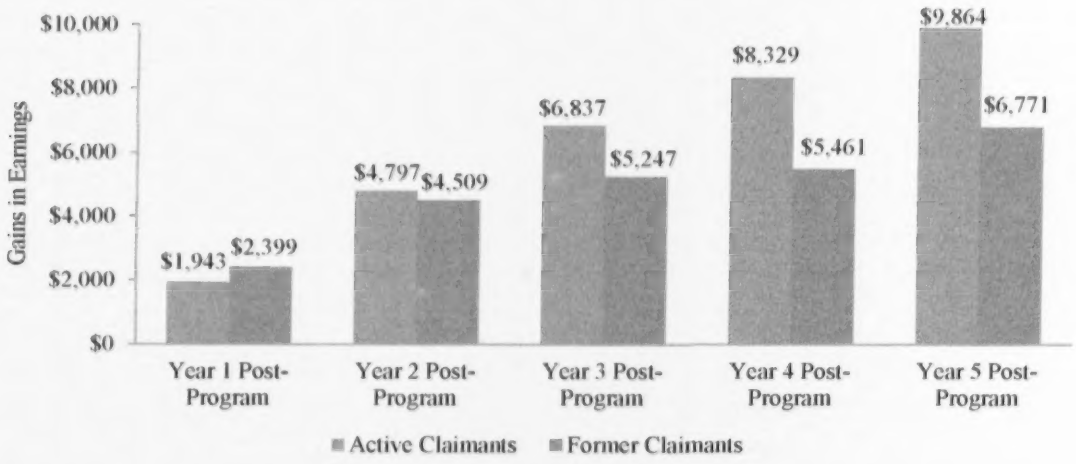
2.2.4 Incremental Impacts

Active Claimants

As shown in Table B2 in Appendix B, active claimants who started Skills Training participation between 2002 and 2005 had incremental increases in earnings and incidence of employment in each of the five years after participation. As shown in Figure 2, gains in earnings continuously increased over time ranging between $1,943 and $9,864 annually in the five years following participation. As well, increases in incidence of employment ranged between 4.9 and 6.8 percentage points annually over the post-program period. Participants also reduced their use of EI (cumulative of $1,585 or 4.6 weeks) and their dependence on income support (ranging

between 1.6 and 2.8 percentage points) in four of the five post-program years. The impacts on the use of social assistance were not statistically significant.

Figure 2. Increased Earnings of Active and Former Skills Training Participants Relative to Non-Participants[7]



Active claimants who started Skills Training participation in the 2006-2008 period had incremental increases in earnings (cumulative of $14,517) and incidence of employment (between 5.8 and 6.5 percentage points) over the three years post-participation. Participants also decreased their use of EI by a cumulative of $541 or 1.6 weeks following participation. As well, they decreased their use of social assistance by a cumulative of $497 and their dependence on government income support (ranging between 2.6 and 3.7 percentage points) over the three post-program years.

Overall, active claimants increased their labour market attachment by increasing their earnings and incidence of employment and decreasing their level of dependence on government income support (use of EI and social assistance).

The results for sub-groups of active claimants were as follows:

- Youth (under 30 years old) who started Skills Training participation in the 2002-2005 period had incremental increases in earnings (cumulative of $28,306) and incidence of employment (ranging between 3.0 and 4.8 percentage points) in all five years after participation. As well, they decreased their use of EI by a cumulative of $1,507 or 4.1 weeks following participation.
- Incremental impacts for long-tenured workers who started Skills Training participation between 2007 and 2009 were largely non-statistically significant.

[7] Incremental impacts on earnings are estimated relative to pre-participation levels and to the comparison group. They are estimated using current dollars.

Former Claimants

Former claimants who started Skills Training participation between 2002 and 2005 had incremental increases in employment earnings in all years after participation. Gains in earnings increased from $2,399 in the first year to $6,771 in the fifth year following participation (see Figure 2 and Table B3). As well, participants had increases in the incidence of employment ranging between 5.1 and 8.6 percentage points annually in the five post-participation years. Although the use of EI increased by a cumulative of $902 or 3.6 weeks following participation, former claimants decreased their use of social assistance by a cumulative of $1,789 and reduced their dependence on government income support by 2.7 and 3.2 percentage points in the second and fifth year post-participation.

Former claimants who started their program participation between 2006 and 2008 increased their employment earnings (cumulative of $16,985) and their incidence of employment (ranging between 6.3 and 8.7 percentage points) over the three years post-participation. As well, they decreased their use of social assistance (cumulative of $1,374) and their dependence on income support (ranging between 3.3 and 7.4 percentage points) following participation. Impacts on the use of EI were not statistically significant for this cohort.

Overall, former claimants improved their labour market attachment through increases in earnings and incidence of employment, as well as decreases in their use of social assistance and their dependence on government income support. The increase in EI use for the 2002-2005 cohort indicates the inability of some former claimants to maintain the employment secured following participation. However, it can also be argued that the increase in EI use is an indication of an increase in labour market attachment for this client group since they also experienced increases in their earnings and incidence of employment and decreases in social assistance use and overall dependence on income support.

Youth (under 30 years old) who started Skills Training participation between 2002 and 2005 had incremental increases in earnings in four of the five post-program years, as well as a gain in incidence of employment in the second year after participation. The incremental impacts on the use of EI, use of social assistance and dependence on income support were not statistically significant.

2.2.5 Cost-Benefit Results

As shown in Table B4 in Appendix B, for active claimants, the benefits of Skills Training matched the costs 3.2 years after participation. Six years after participation, the benefits exceeded the costs by $24,145. For former claimants, the benefits matched the costs 2.4 years after participation and exceeded the costs by $20,619 six years after the end of participation.

2.2.6 Challenges and Lessons Learned About Skills Training Design and Delivery

Based on a document review and four key informant interviews completed in the summer of 2015

Key informants identified common barriers to employment experienced by Skills Training participants including a lack of work experience/employment opportunities; lack of education; lack of skills or skills not relevant for the current job market; disabilities and mental health issues; and a lack of job readiness.

As well, key informants identified the following challenges in relation to the design and delivery of Skills Training:

- Lack of awareness of the program and the application process.
- Applying for Canada Student Loans in most cases can be a cumbersome and frustrating process for some participants.
- Consultants no longer have a contact from the federal government for inquiries about issues with a participant's EI claim.
- Lack of funding for childcare.
- The cost and difficulties of using distance and online learning.

Key informants also identified a number of lessons learned and best practices:

- Developing information packages for popular training programs such as truck driving and administrative assistants helps potential participants understand the occupation and training requirements before entering training.
- Determining appropriate supports on an individual basis instead of providing a set amount of support.
- Conducting needs assessments upfront.
- Building relationships and maintaining communication with training institutions, industries and Aboriginal communities.
- Having well-trained and knowledgeable staff to effectively negotiate supports with participants.

2.3 Skills Training – Apprenticeship

2.3.1 Program Description and Delivery

Based on a document review and five key informant interviews completed in the summer of 2015

Apprenticeship Training is delivered through the Saskatchewan Apprenticeship and Trades Certification Commission. The Commission is responsible for registering apprentices and contracting for the delivery of apprenticeship training through the provincial training system (85% of training is delivered through Saskatchewan Polytechnic). The Commission is also involved in determining the number of classes and training opportunities per trade as well as for scheduling training with registered apprentices. The Commission produces a three-year forecast for training needs including projections on the types of trades in demand and the anticipated number of apprenticeship registrations.

Apprenticeship Training funding is provided to participants as a living away from home allowance and is used to purchase seats for participants in training institutions. There is a requirement for the apprentice to pay approximately 20% of the cost of tuition.

Once the apprentice begins training, the Commission monitors attendance on an ongoing basis and consults regularly with instructors. Apprentices can be counselled as well during the training. The Commission also monitors the number of hours worked by the apprentice.

2.3.2 Profile of Skills Training – Apprenticeship Participants

As show in Table C1 in Appendix C, the majority of active claimants who started participation in the Skills Training – Apprenticeship program in 2003-2005 and 2013-2014 were male (92% each). Most active claimants who started participation between 2003-2005 were under 34 years old (84%), while those who started in 2013-2014 were between 25 and 44 years of age (76%). As well, participants most frequently held occupations requiring college or apprenticeship training in the year before participation (81% and 94% respectively).

Former claimants who participated in Apprenticeship Training in the 2003-2005 and 2013-2014 cohorts were primarily male (91% and 88% respectively). The 2003-2005 cohort was slightly younger than the 2013-2014 cohort, with the majority (76%) aged 34 years or under compared to 75% of the 2013-2014 cohort who were between 25 and 44 years old. Most of these participants had an occupation requiring college or apprenticeship training prior to participation (58% and 61% respectively).

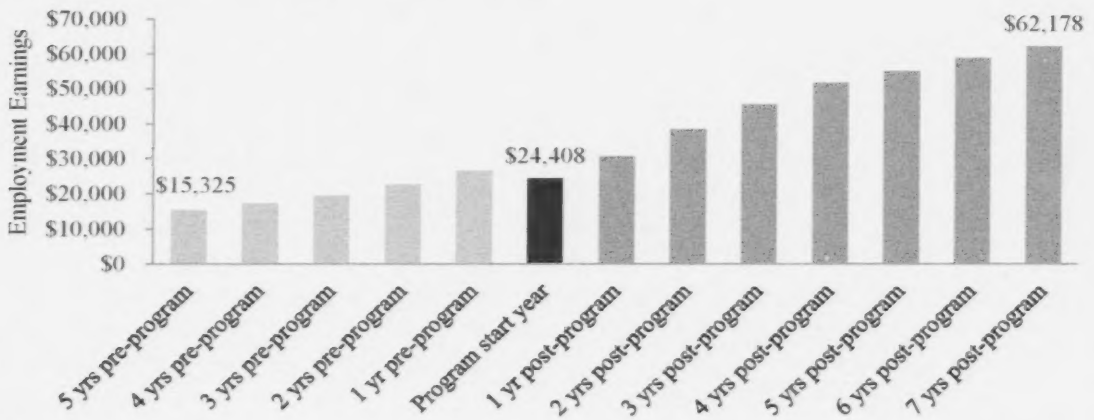
2.3.3 Labour Market Outcomes

Tables C2 and C3 in Appendix C present the labour market outcomes for active and former EI claimants who started their program participation during the 2003-2005 period.

Active Claimants

As shown in Figure 3, the employment earnings of active claimants increased from $15,325 in the fifth year pre-program to $62,178 in the seventh year after the program start year. While the average proportion of participants employed was slightly lower in the seven years after the participation start year (ranging between 94% and 98%) compared to before participation (ranging between 95% and 100%), it remained above 94% in all seven years after the program start year. The average proportion of participants on EI steadily decreased in the years after program participation to 14% by the seventh year after the program start year. Higher proportions of self-employed participants and lower proportions of participants on social assistance were also observed during the post-program period.

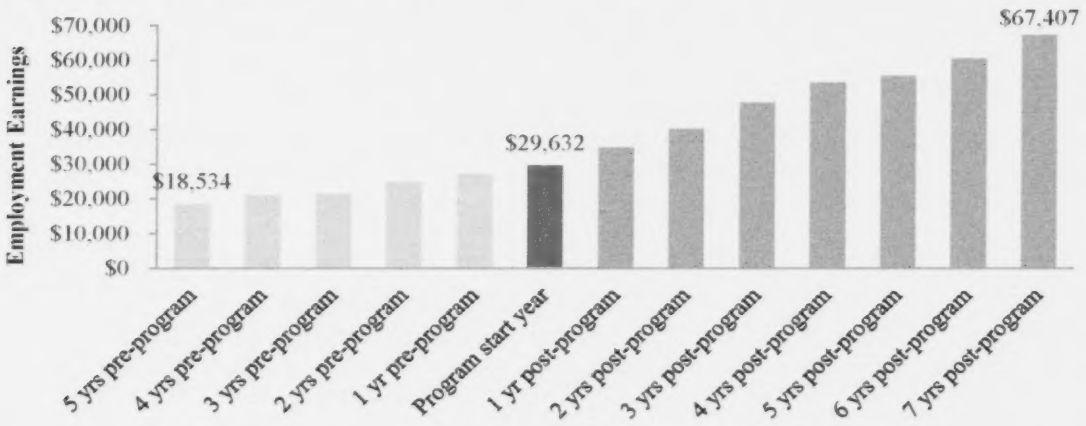
Figure 3. Average Earnings for Active Claimant Participants in Skills Training – Apprenticeship (in Current Dollars)



Former Claimants

As shown in Figure 4, average annual earnings for former claimant participants steadily increased across all years before and after participation, from $18,534 in the fifth year pre-program to $67,407 in the seventh post-program year. The average annual proportion of employed participants fluctuated between 96% and 100% in the five years before participation and then between 94% and 98% in the seven years following the participation start year. The proportion of participants in receipt of EI benefits declined from 38% to 16% in the seven years following participation. Lower proportion of participants on social assistance was also observed during the post-program period.

Figure 4. Average Earnings for Former Claimant Participants in Skills Training – Apprenticeship (in Current Dollars)



2.3.4 Challenges and Lessons Learned About Skills Training – Apprenticeship Design and Delivery

Based on a document review and five key informant interviews completed in the summer of 2015

Existing literature has shown that there is a fairly high non-completion rate among apprentices in Canada (40-50%)[8]. Furthermore, literature revealed that despite the growth in apprenticeship registrations in Canada, there has not been a corresponding increase in completions[9]. While program data do not provide reliable information on completion and non-completion rates for program participants, most key informants confirmed this trend and identified potential factors that could lead apprentices to drop-out from the apprenticeship process. These included:

- Financial constraints.
- Lack of essential skills or academic preparation.
- Employers are unwilling or unable to release their apprentices for training.
- The apprentice realizes that he/she is not suited for the trade selected.
- Social challenges.
- Family issues.

Key informants also noted challenges in relation to program design and delivery. These included:

- EI benefit waiting period is too long.
- Communication and planning challenges between the Ministry of the Economy and the Commission.
- Lack of support for individuals with learning disabilities and in need of accommodations for training.

[8] Red Seal. 2014. *Apprenticeship Completion, Certification and Outcomes*. Ottawa: Red Seal.
[9] Patrick Coe. 2013. "Apprenticeship programme requirements and apprenticeship completion rates in Canada." Journal of Vocational Education and Training. 65(4): 575–605.

- Lack of funding for essential skills training.
- Need to make the application system fully electronic.

Key informants highlighted lessons learned and good practices related to program design and delivery. These included:

- The Canada Apprentice Loan may help offset the challenges created by delays in processing EI benefits.
- Being proactive in setting up training and in monitoring apprentices on the job (hours worked) and during training.
- Use field consultants to meet with employers to monitor how apprentices are learning on the job and to provide apprentices with support during training.

2.4 Targeted Wage Subsidies

2.4.1 Program Description and Delivery

In 2011, Saskatchewan stopped delivering the Targeted Wage Subsidies program. Incremental impacts presented below pertain to participants in the 2002-2005 and 2006-2008 periods.

2.4.2 Profile of Targeted Wage Subsidies Participants

Socio-demographic statistics presented in Table D1 in Appendix D, show that active claimants who started participation in 2002-2005 were slightly more often female (53%) while 2006-2008 participants were slightly more often male (54%). Sixty-two percent of those who participated in 2002-2005 were between 25 and 44 years old, while the majority (55%) of 2006-2008 participants were 35 years old and over. In their last job before program participation, 32% of the 2002-2005 participants and 41% of the 2006-2008 cohort most frequently held occupations requiring secondary or occupational training.

Former claimants who started program participation in 2002-2005 and 2006-2008 were mainly male (52% and 56% respectively). More than half of participants in each cohort were between 25 and 44 years of age (62% and 61% respectively). Thirty-five percent of both cohorts' participants most frequently held occupations requiring secondary or occupational training prior to program participation.

2.4.3 Incremental Impacts

Detailed incremental impact results for active and former claimants are presented in Tables D2 and D3 in Appendix D.

Active Claimants

The incremental impacts for active claimants who started participation in Targeted Wage Subsidies between 2002 and 2005 were predominantly not statistically significant. The only statistically significant result from the analysis showed an increase in the first year of the post-program period of 4.8 percentage points in incidence of employment. As well, results for active claimants who started Targeted Wage Subsidies between 2006 and 2008 are unavailable as the number of participants was too small to produce reliable statistics.

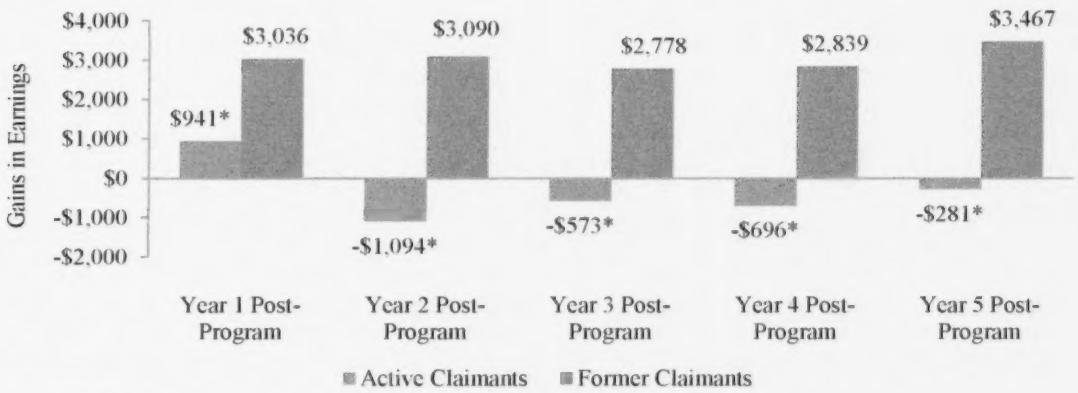
Former Claimants

Former claimants who started participation in Targeted Wage Subsidies in 2002-2005 had incremental increases in earnings ranging between $2,778 and $3,467 annually over the five post-participation years (see Figure 5). These gains were accompanied by increases in their incidence of employment ranging between 6 and 8 percentage points annually in the five years following participation. Participants increased their use of EI by a cumulative of $1,353 or 5.1 weeks and decreased their use of social assistance by a cumulative of $1,623 after program participation. Their dependence on income support was also reduced in three of the five post-program years, ranging between 1.7 and 2.4 percentage points annually.

Similar to the 2002-2005 participants, former claimants who started Targeted Wage Subsidies in 2006-2008 had increased their earnings (cumulative of $12,270), incidence of employment (ranging between 6.2 and 8.9 percentage points) and their use of EI benefits (cumulative of $876) over the three post-program years. Their use of social assistance decreased over the post-program period (cumulative of $2,334) and their dependence on income support decreased in the first year of the post-program period (4.7 percentage points).

The increase in EI use following participation may indicate the inability of some former claimants to maintain the employment secured in the short-term. It can also be argued that the increase in EI use is an indication of an increase in labour market attachment for this client group since they did experience increases in employment earnings and incidence of employment as well as a decrease in the use of social assistance. As a reminder, former claimants are participants for whom the EI benefit period ended up to three years pre-participation.

Figure 5. Increased Earnings of Active and Former Targeted Wage Subsidies Participants Relative to Non-Participants



*The estimates are not statically significant at the 95% confidence level.

2.4.4 Cost-Benefit Results

Most incremental impacts for active claimants who participated in Targeted Wage Subsidies were not statistically significant. However, those results were still used for the cost-benefit analysis as they represent the most reliable estimates available.

As shown in Table D4, the benefits of Targeted Wage Subsidies from society's perspective were $6,702 lower than the costs six years after participation for active claimants. As such, the program costs may never be recovered. For former claimants, the benefits matched the costs within the second year of program participation and exceeded the costs by $20,876 six years after the end of participation.

2.5 Self-Employment

2.5.1 Program Description and Delivery

Based on document review and information available on Saskatchewan's Ministry of the Economy website

The Self-Employment program provides unemployed individuals with financial support as they create a job for themselves by starting a new business. Participants attend business skills development training to develop a comprehensive business plan. Participants also have access to business counselling services and are financially supported for up to 42 weeks[10] as they launch their business plan.

2.5.2 Profile of Self-Employment Participants

As shown in Table E1 in Appendix E, active claimants who started participating in the Self-Employment program in 2002-2005 and 2006-2008 were primarily male (63% and 60% respectively). Most participants in both cohorts were 35 years of age and older (65% and 66% respectively). Prior to program participation, participants in the 2002-2005 cohort most frequently had occupations requiring college or apprenticeship training (42%) whereas the 2006-2008 participants most frequently had occupations requiring secondary or occupational training (35%).

Former claimants who started their Self-Employment participation in 2002-2005 were closely split between male and female (51% and 49% respectively) and were mainly 35 years of age and older (69%). Prior to participation, these claimants most frequently held occupations requiring secondary or occupational training (31%).

The number of former claimants who began participating in Self-Employment between 2006 and 2008 was too small to produce reliable statistics.

2.5.3 Challenges in Measuring Self-Employment Incremental Impacts and Labour Market Outcomes

Incremental impacts for the Self-Employment participants in the 2002-2005 and 2006-2008 periods were not produced because the number of participants was too small.

The labour market outcomes for the participation in the Self-Employment program are presented in Tables E2 and E3 in Appendix E but they are not discussed in the evaluation report since they may not provide an accurate depiction of the financial well-being of the participants in the post-program period. Labour market outcomes on the incidence of employment and earnings were produced using individual earnings reported in the T1 and T4 taxation files from Canada Revenue Agency. However, according to a study from Statistics Canada, self-employed individuals in Canada have a lower average annual income than paid employees ($46,200 versus

[10] OECD (2016), *Employment and Skills Strategies in Saskatchewan and the Yukon, Canada*, OECD Reviews on Local Job Creation, OECD Publishing, Paris. p.106

$52,400 in 2009), but the average net worth of their households is 2.7 times greater than that of the paid employee households, which indicates that some self-employed individuals may leave funds within their business for reinvestment purposes[11]. Overall, this suggests that looking at individual earnings alone, without taking the net worth into consideration, may not provide a fair assessment of how well participants are doing financially after participation.

As well, little is known about the design and delivery of this program. In particular, there is a lack of understanding around the role played by this program in helping future entrepreneurs implement viable business plans and develop their entrepreneurship skills. Overall, it is not clear whether participant's success in improving their labour market attachment through self-employment is more closely associated with their business idea and their entrepreneurship skills or the assistance provided under the Self-Employment program.

[11] Sébastien LaRochelle-Côté and Sharanjit Uppal, "The Financial Well-Being of the Self-Employed," *Perspectives on Labour and Income*, vol. 23, no. 4, Winter 2011.

2.6 Workforce Development

2.6.1 Program Description and Delivery

Based on a document review and 10 key informant interviews completed in the summer of 2013

The Workforce Development program provides financial support to organizations to assist unemployed individuals throughout Saskatchewan to prepare for, obtain and maintain employment. Services provided under this measure are accessible to all unemployed persons seeking employment-related supports. Services are delivered through a combination of direct service provision by the province and through third-party service providers.

The Saskatchewan Ministry of the Economy provides career and employment services to individuals in need of information on career and job opportunities, as well as training and/or education options that enable participation in the local labour market. The services are focused on matching the worker's skills with the skill needs of employers. Third-party contractors develop and manage programs and services which support specific participant groups with barriers to obtain and maintain employment.

Key Workforce Development services and supports provided by Ministry of the Economy staff include:

- Self-services (such as access to computers) to prepare resumes and search for jobs on-line or for information about training and education, as well as job search workshops.
- Assisted services such as employment service needs assessment, stability and transition planning, career and employment planning and counselling, service referrals to agencies and employability assessment, testing, and individual training supports (both financial and non-financial).
- Saskjobs.ca is the provincial job posting site where employers with positions located in Saskatchewan can advertise their jobs. Job seekers can use SaskJobs to manage their job search, view opportunities, apply to positions online with their resumes and post resumes for employers to review.
- The SaskCareers website helps individuals connect to life long career planning and development resources, provides information on the areas of jobs, work, education and training, career planning, self-employment, labour market information, financial help and the workplace.

Workforce Development services provided by third-party service providers include:

- Career enhancement program for unemployed adults, including career assessment (for example, skill level, essential skills, employability skills, interests, value, aptitudes).
- Work preparation services (such as job search, job coaching, workshops, resume writing, interview skills, and assisting clients to research labour market information).
- Workplace skill development (for example, computer skills).
- Unpaid work placement or work experience while on EI (8 to 10 weeks).
- Human resource services for employers (employers pay for services).
- One-on-one intervention sessions and group based interventions.

- Needs assessments (10 step plan).
- Readiness employability strategy, which is developed with each client. This can include one-on-one or group meetings.
- Career occupation survey.

2.6.2 Profile of Workforce Development Participants

The socio-demographic profile was produced for individuals who participated exclusively in Workforce Development without participating in other employment benefits.

Active Claimants

As shown in Table F1in Appendix F, active claimants who started their participation in 2002-2005 and in 2006-2008 were mostly males (61% each). Over half of the participants in both cohorts were between 25 and 44 years of age (58% and 56% respectively). Prior to participating in Workforce Development, active claimants most frequently held occupations requiring secondary or occupational training (36% and 40% respectively).

Former Claimants

Former claimants who participated exclusively in Workforce Development were predominately male in both the 2002-2005 and 2005-2008 cohorts (59% and 55% respectively). Sixty-two percent of participants in the 2002-2005 and 2006-2008 cohorts were between 25 and 44 years old. As well, participants in both cohorts most frequently held occupations requiring secondary or occupational training before program participation (35% and 38% respectively).

Labour Market Barriers Faced by Workforce Development Participants

Based on a document review and 10 key informant interviews completed in the summer of 2013

Key informants identified a number of barriers experienced by Workforce Development participants in Saskatchewan. These are:

- Lack of transportation, especially in rural areas.
- Lack of affordable housing.
- Seasonal employment.
- Personal issues such as criminal records, addictions, physical and mental health issues, and social behavioural problems.
- Lack of essential skills and/or outdated skills.
- Refusal to take entry-level position.
- Lack of balance between family and job.

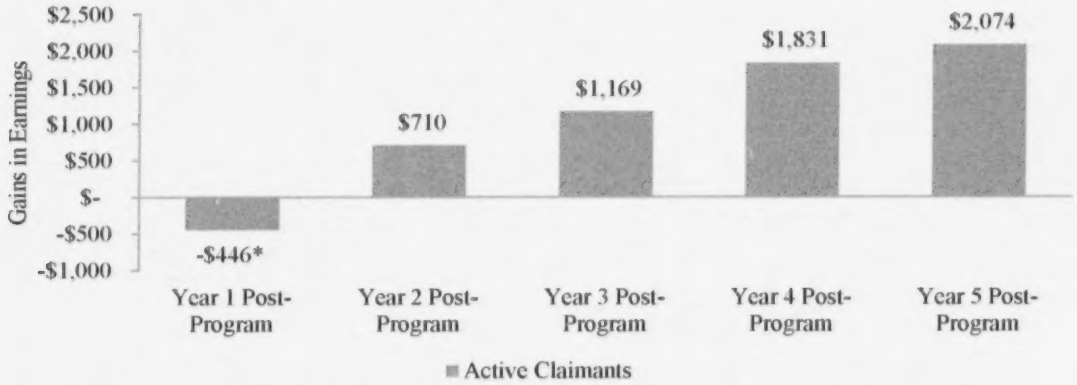
As well, key informants noted multiple labour market challenges experienced by new immigrants including racism, language barriers, lack of foreign credential recognition, lack of Canadian work experience, and lack of knowledge of the Canadian workplace culture. Indigenious individuals also experience multiple barriers to the labour market according to key informants, including racism, addictions, lack of transportation and lack of child care services.

2.6.3 Incremental Impacts

Incremental impacts were only produced for active claimants since former claimants who participated exclusively in Workforce Development were used as a comparison group for former claimants who participated in other EBSMs.

Results presented in Table F2 in Appendix F indicate that active claimants who participated exclusively in Workforce Development between 2002 and 2005 increased their earnings by a cumulative of $5,337 in the last four of five post-program years (see Figure 6). Participants also reduced their use of EI in all years after participation by a cumulative of $1,696 or 5.3 weeks. Results for incidence of employment were only statistically significant in the fifth year post-program, where it increased 1.6 percentage points for participants. Social assistance use increased ($122) in the first year and decreased ($56) in the fourth year after participation. Dependence on income support also decreased between 1.5 and 1.9 percentage points annually in all five post-program years for active claimant participants.

Figure 6. Increased Earnings of Active Workforce Development Participants Relative to Non-Participants



* The estimate is not statistically significant at the 95% confidence level.

Results for active claimants who participated in Workforce Development services in 2006-2008 showed incremental increases in earnings (cumulative of $1,741) and gains in incidence of employment in the first and second (1.9 and 2.1 percentage points) of the three years following participation. Their use of EI decreased by a cumulative of $1,052 or 3.1 weeks, while their use of social assistance increased by a cumulative of $436 over the three years following participation.

Overall, active claimant who participated in Workforce Development services improved their labour market attachment through gains in earnings, some gains in incidence of employment and decreases in EI use and in the level of dependence on government income support.

The results varied for the three sub-groups examined:

- Youth (under 30 years old) who started a Workforce Development intervention between 2002 and 2005 had incremental gains in earnings in the last four years after participation, and a gain in their incidence of employment in the third year following participation. Their use of EI and dependence on income support decreased in all post-program years. Their use of social assistance increased in the first post-program year only.
- Older workers (55 years old and over) who started a Workforce Development intervention between 2002 and 2005 had incremental gains in earnings in the last three post-program years, as well as increased incidence of employment in the fourth and fifth years following participation. Incremental impacts for the use of EI, social assistance and dependence on income support were not statistically significant.
- Long-tenured workers who started a Workforce Development intervention between 2007 and 2009 had decreased earnings in the first year post-program. They decreased their number of weeks of EI use in the third year after participation, but increased their use of social assistance (cumulative of $357) following participation, indicating their difficulty to reintegrate into the labour market.

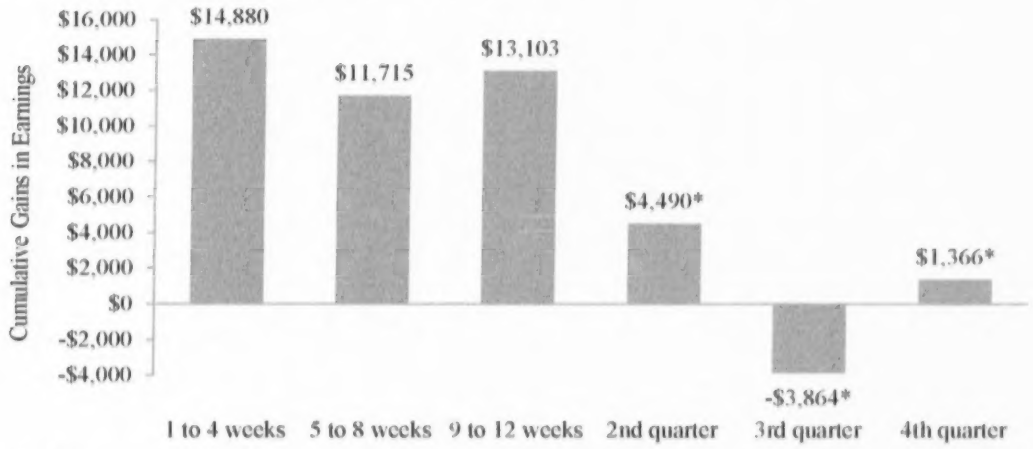
Earlier Participation in Workforce Development Services Improves Participants' Labour Market Outcomes

The study on the effects related to the timing of participation showed that incremental impacts of program participation on earnings and employment were larger for individuals who received Workforce Development services early during their EI claim compared to non-participants and individuals who remained on EI longer before receiving these services (see Figure 7 below and Table F3 in Appendix F). Specifically, individuals who started their participation within four weeks following the start of their EI benefit period had a cumulative gain in earnings of $14,880 over the five post-program years.

Active claimants who participated in Workforce Development in weeks 5 to 8 and weeks 9 to 12 after the start of their EI claim had gains in earnings totalling $11,715 and $13,103 respectively over the post-program period. Participants who started Workforce Development interventions in the 2nd, 3rd and 4th quarters of their EI benefit period had non-statistically significant cumulative impacts on terms of employment earnings.

The study also looked at the difference between the number of EI weeks unused by participants and their comparison group to determine the effect of the timing of participation in Workforce Development on the return to employment. It was found that those who received assistance within the first four weeks of their claim returned to employment earlier than the comparison group. Specifically, they returned to employment 2.3 weeks earlier than the comparison group (see Table F4 in Appendix F). Participants who started a Workforce Development intervention in the fifth week or later returned to employment later than the comparison group.

Figure 7. Cumulative Incremental Impacts on Earnings Related to the Timing of Participation in Workforce Development



* The estimates are not statistically significant at the 95% confidence level

Among all Workforce Development participants in the 2002-2005 period, 1,837 received assistance within the first 4 weeks of establishing an EI claim. With an average weekly EI benefit of $304 during this period, the 1,837 participants did not use $1,284,430 in EI benefits (1,837 * $304* 2.3 weeks). The average cost of receiving only Workforce Development interventions in the 2002-2005 period was $336. This represents a cost of $617,232 (1,837 * $336) for a net saving of $667,198 in EI benefits.

2.6.4 Cost-Benefit Results

As shown in Table F5 in Appendix F, the benefits of Workforce Development from the society perspective exceeded the cost by $4,749 six years after participation. These benefits would have to be sustained for 3.8 years after participation in order to recover the costs.

2.6.5 Challenges and Lessons Learned About Workforce Development Design and Delivery

Based on a document review and 10 key informant interviews completed in the summer of 2013

Key informants highlighted a number of challenges with delivering Workforce Development services including:

- Lack of awareness of the program.
- Difficulty hiring and keeping skilled and knowledgeable services providers.
- Difficulties in providing a one-stop-shop for participants.
- Participants with multiple barriers to employment may require long-term services and multiple programs.

Best practices and lessons learned related to the general design and delivery of program and services included:

- Conduct a needs/skills assessment and create a return-to-work-action-plan based on the specific needs of the participant.
- Timely provision of services to participants, especially for training opportunities.
- Contractual obligations are very tight and more flexibility in terms of spending would provide for a more tailored and innovative approach.
- Provide opportunities for service providers to develop working relationship with federal/provincial staff and other service providers.
- Ongoing marketing of programs and services.

3. Comparison of Key Findings by Program Type

This section provides an overview of the key findings from the incremental impact analysis and cost benefit analysis for Skills Training, Targeted Wage Subsidies and Workforce Development for both active and former EI claimant participants who started participation in the 2002-2005 period.

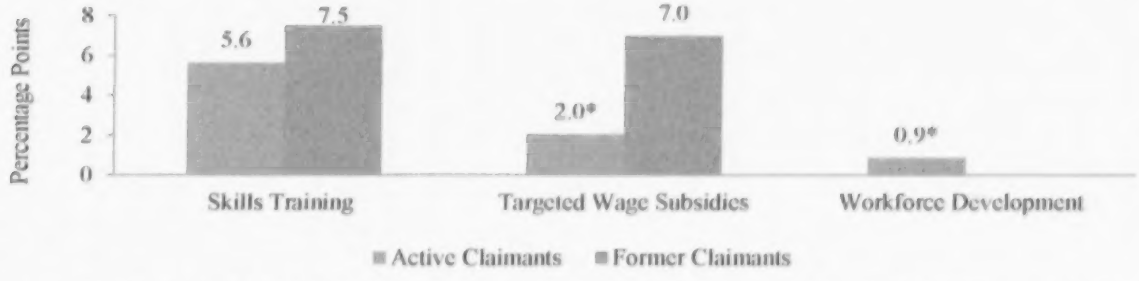
Overall, incremental impacts demonstrate that LMDA programs and services are improving the labour market attachment of most participants in Saskatchewan, including youth and older workers. As well, the social benefits of participation exceeded the cost of investment for most interventions over time. Finally, providing Workforce Development services earlier during an EI claim (first four weeks) produced larger impacts on earnings and facilitated participants' earlier return to work. This demonstrates the importance of targeting early participation of EI active claimants.

Some program participants have a higher probability of being employed than comparison group members

As show in Figure 8, active EI claimants who participated in Skills Training, including youth, had a higher probability of being employed (i.e. increased their incidence of employment) compared to similar non-participants. As well, former EI claimants who participated in Skills Training and Targeted Wage Subsidies had a higher probability of being employed compared to former EI claimants who received low intensity interventions under Workforce Development.

It is noted that Workforce Development services are relatively modest activities such as counselling, job search assistance and case management. By themselves, they are not expected to lead to substantial effects on labour market outcomes. However, as demonstrated in the report, providing Workforce Development services earlier during the EI claim (first four weeks) generates significantly greater returns (see Figure 7).

Figure 8. Change in Probability of Being Employed in Participants Relative to Non-Participants



*The estimates in Figure 8 are arithmetic averages of five annual estimates. Active claimants who participated in Targeted Wage Subsidies had an incremental increase in the incidence of employment (4.8 percentage points) in year 1 following participation. Participants in Workforce Development had an incremental increase in the incidence of employment in year 5 following participation (1.6 percentage points).

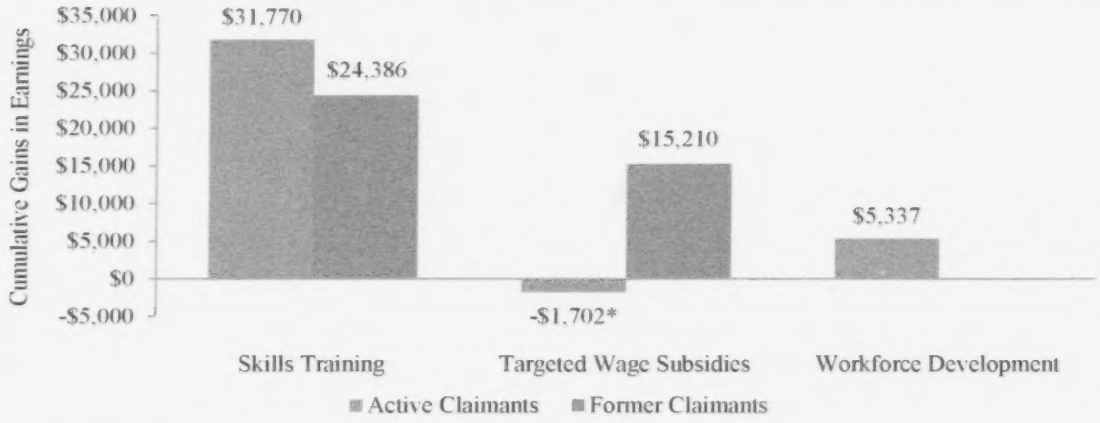
Increased earnings for participants compared to comparison group members

As shown in Figure 9, active EI claimants who participated in Skills Training and Workforce Development services, including youth, increased their employment earnings compared to similar non-participants. Older workers who participated in Workforce Development also had gains in earnings in three out of five post-program years.

As well, former EI claimants who participated in Skills Training and Targeted Wage Subsidies increased their employment earnings compared to former EI claimants who received Workforce Development services exclusively.

As already noted, providing Workforce Development services earlier during the EI claim (first 4 weeks) generates significantly greater returns.

Figure 9. Increased Cumulative Earnings of Participants Compared to Non-Participants

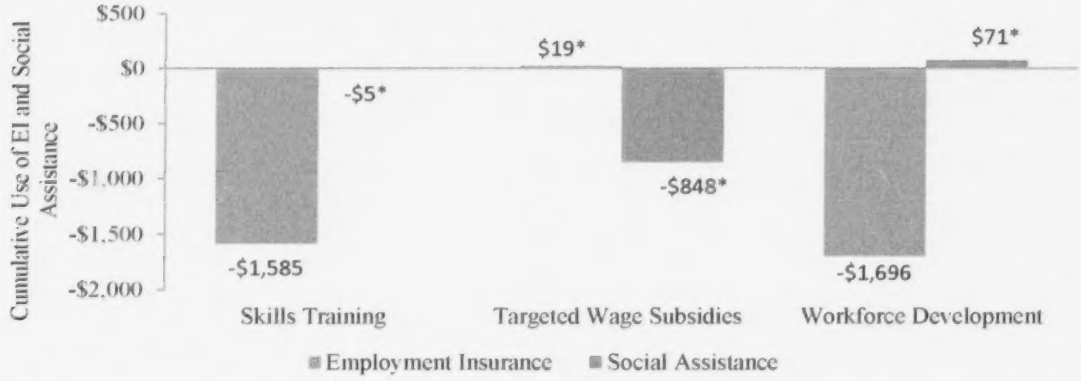


* The estimate is not statistically significant at the 95% confidence level.

The use of EI is reduced for most active claimants. While EI use increased for former claimants who participated in Skills Training and Workforce Development, it can be argued that this reflects an increase in labour market attachment since the incremental impacts on employment earnings and incidence of employment are positive and given the decrease in their use of social assistance.

As shown in Figure 10, active EI claimants who participated in the Skills Training and Workforce Development decreased their use of EI compared to similar non-participants. All other impacts on EI and social assistance use for active claimants were not statistically significant.

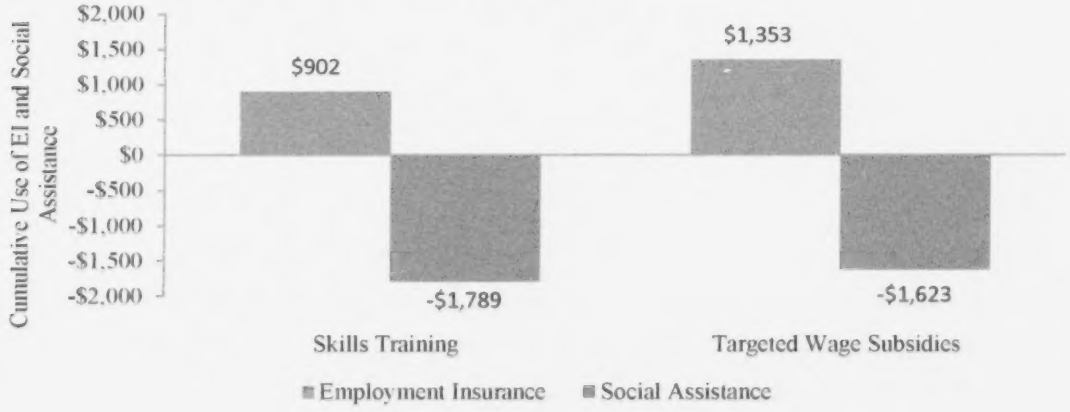
Figure 10. Change in the Cumulative Use of Employment Insurance and Social Assistance for Active Claimants Relative to Non-Participants



* The estimates are not statistically significant at the 95% confidence level

As shown in Figure 11, former claimants who participated in Skills Training and Targeted Wage Subsidies between 2002 and 2005 increased their use of EI following program participation. This indicates the inability of some former claimants to maintain the employment secured in the short-term. However, these participants decreased their use of social assistance following participation. It can also be argued that the increase in EI use is an indication of an increase in the labour market attachment for this client group since most participants experienced increases in employment earnings and incidence of employment as well as a decrease in the use of social assistance. As a reminder, former claimants are participants for whom the EI benefit period ended up to three years pre-participation.

Figure 11. Change in Cumulative Use of Employment Insurance and Social Assistance for Former Claimants Relative to Non-Participants



Social benefits of participation exceeded the cost of investments for most interventions.

As shown in Table 3, social benefits to participation exceeded investment costs in a period ranging from the second year of program participation to about 4 years after participation for most interventions. This excludes those active claimants who participated in Targeted Wage Subsidies, for whom the investment costs may never be recovered.

Table 3. Number of Years for the Benefits to Exceed Program Costs

	Skills Training	Targeted Wage Subsidies	Workforce Development
Active Claimants	3.2	Costs may never be recovered	3.8
Former Claimants	2.4	2nd Year of Participation	

4. Conclusions

Evaluation evidence presented and discussed in this report demonstrates that programs and services designed and delivered by Saskatchewan under the LMDA are generally helping participants improve their labour market experience after participation. As such, evaluation evidence suggests that LMDA funded programming contributes to meeting some of the Ministry of the Economy's key priorities.

Overall, incremental impacts demonstrate that LMDA programs and services are improving the labour market attachment of participants, including youth (under 30 years old) and older workers (55 years old and over). As well, social benefits of participation exceeded the cost of investments for most interventions over time. Finally, providing Workforce Development services earlier during an EI claim (first four weeks) produced larger impacts on earnings and facilitated earlier return to work. This demonstrates the importance of targeting early participation of EI active claimants.

Key informant interviews with service providers and program managers as well as the documents reviewed and the questionnaires completed by Saskatchewan representatives revealed specific challenges and lessons learned about program design and delivery. Key challenges are highlighted below.

Skills Training

- Key informants identified common barriers to employment experienced by Skills Training participants including a lack of work experience/employment opportunities; lack of education; lack of skills or skills not relevant for the current job market; disabilities and mental health issues; and a lack of job readiness.

- As well, key informants identified the following challenges related to Skills Training design and delivery:
    - Lack of awareness of the program and the application process.
    - Applying for Student Loans in most cases can be a cumbersome and frustrating process for some participants.
    - Consultants no longer have a contact from the federal government for inquiries about issues with a participant's EI claim.
    - Lack of funding for childcare.
    - The cost and difficulties of using distance and online learning.

Apprenticeship Training

- Existing literature showed that there is a fairly high non-completion rate among apprentices in Canada (40-50%)[12]. Furthermore, literature revealed that despite the growth in apprenticeship registrations in Canada, there has not been a corresponding increase in completions.[13] While

[12] Red Seal. 2014. *Apprenticeship Completion, Certification and Outcomes*. Ottawa: Red Seal.
[13] Patrick Coe. 2013. "Apprenticeship Programme Requirements and Apprenticeship Completion Rates in Canada." *Journal of Vocational Education and Training*. 65(4): 575-605

available data do not provide reliable information on completion and non-completion rates of participants, key informants interviewed in the evaluation confirmed this trend and identified potential factors that could lead them to drop out of the apprenticeship process. These included:

- Financial constraints.
- Lack of essential skills or academic preparation.
- Employers are unwilling or unable to release their apprentices for training.
- The apprentice realizes that he/she is not suited for the trade selected.
- Social challenges.
- Family issues.

- Other challenges noted by key informants regarding the design and delivery of Apprenticeship Training included:
  - EI benefit waiting period is too long.
  - Communication and planning challenges between the Ministry of the Economy and the Apprenticeship Commission.
  - Lack of support for individuals with learning disabilities and in need of accommodations for training.
  - Lack of funding for essential skills training.
  - Need to make the application system fully electronic.

Workforce Development

- Key informants highlighted a number of challenges with delivering Workforce Development services including:
  - Lack of awareness of the program.
  - Difficulty hiring and keeping skilled and knowledgeable services providers.
  - Difficulties in providing a one-stop-shop for participants.
  - Participants with multiple barriers to employment may require long-term services and multiple programs.

5. Recommendations

A total of four recommendations emerged from the evaluation findings. They are as follows:

- The study on the timing of participation in Workforce Development services showed that receiving assistance early after starting an employment insurance claim can lead to better labour market impacts. As well, key informants reported a lack of awareness about the Workforce Development services.

  - *Recommendation 1*: Consideration should be given to providing Saskatchewan with timely access to data on new EI recipients to support targeting and to increase awareness.

- Key informants reported that lack of education, lack of skills or skills not relevant for the current job market are among the common barriers to employment experienced by Skills Training participants. As well, 56% of program funds in 2013-2014 were invested in Adult Basic Education and Essential Skills for the Workplace.

  - *Recommendation 2:* Given the relevance of providing Adult Basic Education and literacy/essential skills training to assist individuals with multiple barriers prepare for vocational training and integrate into the labour market, these interventions should be reported separately from other programs and services, especially Occupational Skills Training, given their unique objectives.

- The evaluation was not able to produce a conclusive assessment of the Self-Employment program effectiveness and efficiency since the data used to assess impacts on earnings may not be the best source of information available to reflect the financial wellbeing of the participants. As well, it is not clear whether the participant's success in improving their labour market attachment through self-employment is more closely associated with their business idea and their entrepreneurship skills rather than the assistance provided under Self-Employment.

  - *Recommendation 3*: Consideration should be given to examine in more detail the design and delivery of the Self-Employment program and whether the performance indicators for this program are appropriate.

- Overall, the LMDA evaluation was able to produce a sound assessment of EBSM effectiveness and efficiency because the team had access to rich data on EI claimants, EBSM participation data and Canada Revenue Agency taxation files. However, some data gaps limited the evaluation's ability to assess how EBSMs operate.

  - *Recommendation 4*: Improvements in the data collection process are recommended to address key program and policy questions of interest to the federal and P/T governments. Specifically:
    - Collect data on whether participants are members of designated groups including Indigenous peoples, persons with disabilities and recent immigrants.
    - Collect data on the type of training funded under Skills Training and the type of assistance provided under Workforce Development. Saskatchewan, ESDC and other P/Ts should work together to define common categories for both EBSMs.
    - Collect detailed data on the cost of interventions.

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Acronyms

EBSM	Employment Benefits and Support Measures
EI	Employment Insurance
ESDC	Employment and Social Development Canada
LMDA	Labour Market Development Agreements
P/T	Province/Territory

Appendix A – Methodology

Qualitative Data

Qualitative data reported in the Skills Training, Skills Training – Apprenticeship, and Workforce Development studies were collected from key informant interviews with managers and service providers and a document/literature review. As well, questionnaires were completed by Saskatchewan representatives for the Skills Training and Skills Training – Apprenticeship studies. Table A1 provides the number of key informants interviewed.

Key informant interviews for the Workforce Development study were conducted in 2013 while those for the Skills Training and Skills Training – Apprenticeship studies were conducted in 2015.

Table A1. Number of Key Informant Interviews Conducted for the LMDA Studies

	Studies		
	Skills Training	**Skills Training - Apprenticeship**	**Workforce Development**
Number of Key informant Interviews (Managers and Service Providers)	4	5	10

Quantitative Methods

All quantitative analyses were conducted using linked administrative data from EI Part I (EI claim), EI Part II (EBSM participation data) and T1 and T4 taxation files for 100% of the participants in Saskatchewan.

Incremental Impacts

The incremental impact analysis compared the labour market experience of participants before and after their participation with that of a comparison group. The goal was to determine the direct effect of program participation on key labour market indicators (see Figure 1 in the introduction section).

For active claimants, incremental impacts were measured relative to a comparison group of active claimants who could have participated in the EBSMs but did not. Former claimants can be underemployed and unable to requalify for EI, out of the labour force for various reasons or on social assistance. Based on previous evaluation methodologies, on expert advice and given the difficulty in generating a suitable comparison for former claimants using administrative data alone, the comparison group for former claimants was created using individuals who participated in low-intensity Workforce Development services only during the reference period. This is a conservative approach given the fact that participation in Workforce Development can lead to limited effects on labour market outcomes.

Participants and non-participants were matched based on a wide array of variables including age, sex, location, skill level required by the last occupation held prior to participation, reason for separation from employment, industry in which they were previously employed as well as

employment earnings and use of EI and social assistance for each of the five years before participation.

All analyses were conducted using a unit of analysis called the Action Plan Equivalent, which combines all EBSMs given to an individual within no more than six months of each other. For reporting purposes, incremental impacts were attributed to the longest intervention of the Action Plan Equivalent when Skills Training, Targeted Wage Subsidies or Self-Employment program was the longest intervention. Impacts for Workforce Development were calculated for Action Plan Equivalents that contained only Workforce Development services with no employment benefits.

The incremental impact estimates were produced using non-experimental methods, namely propensity score matching, using the Kernel Matching method, along with Difference-in-Differences method to estimate program impacts. Alternative matching techniques (i.e., Nearest Neighbour and Inverse Propensity Weighting) were also used for validation purposes.

Incremental impacts were measured for the following indicators:

- Employment/self-employment earnings represent the total earnings an individual had from paid employment and/or self-employment. (This information is available by calendar year and was obtained from T1 and T4 tax return records).
- Incidence of employment/self-employment represents the incidence of having earnings from employment and/or self-employment.
- Amount of EI benefits received represents the average amount of EI benefits received.
- Weeks in receipt of EI benefits represents the average number of weeks during which EI benefits were received.
- Social assistance benefits represent the average amount of social assistance benefits received. (This information is available by calendar year and is obtained from T1 tax return records.)
- Dependence on income support represents the ratio of participant's income that came from EI and social assistance benefits (i.e., EI benefits + social assistance benefits / (EI benefits + social assistance benefits + earnings from employment/self/employment)).

Incremental impacts were estimated for different cohorts of participants:

- Active and former claimants as well as youth (under 30 years old) and older workers (55 years old and over) who started their EBSM participation between April 1, 2002 and March 31, 2005.
- Active and former claimants who started their EBSM participation between January 1, 2006 and March 31, 2008.
- Active and former claimants who were long-tenured workers and who started their EBSM participation between January 1, 2007 and December 31, 2009. The long-tenured workers covered in this study are individuals who have established an EI regular or fishing benefit claimants and who had paid at least 30% of the annual maximum employee EI premiums in seven of the ten years preceding their EI claim and who had collected 35 or fewer weeks of EI regular or fishing benefits in the five years preceding their claim. This definition is similar to the EI claimant category long-tenured workers introduced under Connecting Canadians with Available Jobs.

Cost-Benefit Analysis

The cost-benefit analysis compared how much it cost for individuals to participate in the programs and how much it costs the government to deliver those programs with the benefits both the participants and the government drew from those programs. The analysis was carried out from the society perspective which combines the costs and the benefits for both the participants and the government.

Costs and benefits included in the calculations were as follows:

- Program costs included the administration cost and the direct cost of the EBSMs. The cost for each EBSM was calculated at the Action Plan Equivalent level. The costs were determined based on the average composition of the Action Plan Equivalent.
- The Marginal Social Cost of Public Funds represented the loss incurred by society when raising additional revenues such as taxes to fund government spending. The value was estimated as 20% of the program cost, sales taxes, income taxes, impacts on EI and impacts on social assistance paid or collected by the government.
- Employment earnings consisted of incremental impacts on participants' earnings during and after participation. The calculation accounts for the participant's forgone earnings during participation (opportunity cost). These are based on incremental impacts for the 2002-2005 participants.
- Fringe benefits included benefits such as employer-paid health and life insurance as well as pension contributions. The rate used to calculate the fringe benefits was 15% of the incremental impact on earnings.

The program effects on EI and social assistance use, and the sale and income tax revenues were not included in the calculations since these costs and benefits cancel each other out from the social perspective by definition. For example, while EI and social assistance are benefits received by participants, they represent a cost for the government. However, as indicated above, these effects are accounted for in the calculation of the Marginal Social Cost of Public Funds.

When producing the results, to bring all costs and benefits to a common base and to account for inflation and interest on foregone government investment, the estimates for the second year of participation and up to the sixth year post-program were discounted by 5% per year. As well, when the benefits were still lower than the costs six years after program end, the payback period was calculated by assuming that the average benefit or cost measured over the fifth and six year post-program would persist over time (discounted at a 5% annual rate).

Strengths and Limitations from the Studies

Overall, the number of key informants interviewed was relatively small in some studies. The key informants' responses were representative of their own experience and their own region but it is unclear if they were fully representative of the entire province.

The matching process led to the creation of comparison groups closely matched to the LMDA participants in terms of their background characteristics. Results obtained with Kernel Matching were validated with the use of two other techniques (Inverse Propensity Weighting and Nearest Neighbour), increasing the level of confidence in the results. However, readers should be aware

that incremental impacts may be affected by factors not captured by the matching process. For example, the motivation to seek employment was not directly measured except to the extent it was captured in prior income and labour market attachment patterns.

Readers should also keep in mind that it is not possible to compare the results obtained for each claimant type since the results for active claimants represent the effects of the EBSMs relative to non-participation while the results for former claimants represents the Employment Benefits relative to a limited treatment (Workforce Development).

The definition for long-tenured workers differs from the definition used in the literature as it does not consider the number of years the worker remained employed with the same employer.

The cost-benefit analysis was limited in the sense that it only took into account the quantifiable benefits and costs that were directly linked to EBSM delivery and participation and that could be estimated using available administrative data and the EI Monitoring and Assessment Report. The analysis did not capture "intangible", non-pecuniary and indirect benefits. It did not consider the multiplier effect that improving participant's income may have on the economy and did not account for the effect of EI Part II investment on sustaining a service delivery infrastructure and creating jobs among the governmental program service providers. As well, this analysis did not consider the displacement effect where participants may take away jobs that would otherwise be filled by other unemployed individuals. Finally, this analysis did not consider the possible effect of EBSMs on increasing skill prices.

Appendix B –Detailed Results Skills Training

Table B1. Socio-Demographic and Labour Market Characteristics of Skills Training Participants

	Active Claimants		Former Claimants	
	2002-2005	2006-2008	2002-2005	2006-2008
Number of observations	2,089	1,375	642	514
Gender				
Male	54%	50%	43%	39%
Female	46%	50%	57%	61%
Age				
Under 25	33%	24%	22%	25%
25-34	31%	31%	38%	39%
35-44	20%	23%	25%	19%
45-54	13%	15%	12%	14%
55 and over	3%	6%	3%	4%
Marital status				
Married or common-law	38%	44%	37%	31%
Widowed or divorced/ separated	12%	12%	14%	16%
Single	49%	43%	48%	50%
Missing data / Unknown	1%	2%	1%	3%
Skills level related to National Occupation Code associated with the last EI claim opened before Skills Training participation[1]				
Managerial	5%	7%	6%	6%
University	4%	4%	5%	5%
College or apprenticeship training	26%	23%	22%	25%
Secondary or occupational training	41%	43%	40%	40%
On-the-job training	24%	23%	27%	24%
Key Labour Market Indicators In the Year Preceding the Start of Participation				
Earnings[2]	$19,818	$22,067[3]	$8,304	$12,364[3]
Proportion Employed	98%	99%	77%	88%
Proportion on Employment Insurance	42%	48%	52%	66%
Proportion on Social Assistance	8%	8%	28%	22%

Proportions may not add up to 100% due to rounding

[1]Skill level corresponds to the type and/or amount of training or education typically required to work in the last occupation participants had before opening the last EI claim they had before participating in EBSMs:

-Managerial: Management occupations

-University: Occupations usually requiring university education (for example, university degree at the bachelor's, master's or doctorate level)

-College or apprenticeship training: Occupations usually requiring college or vocational education or apprenticeship training such as 2 to 3 years of post-secondary education at a community college, institute of technology or CEGEP or 2 to 5 years of apprenticeship training or 3 to 4 years of secondary school and more than 2 years of on-the-job training, specialized training courses or specific work experience and/or occupations with supervisory responsibilities and occupations with significant health and safety responsibilities, such as firefighters, police officers and registered nursing assistants.

- Secondary or occupational training: Occupations usually requiring secondary school and/or occupation-specific training such as one to four years of secondary school education or up to 2 years of on-the-job training specialized training courses or specific work experience.

-On-the-job training: On-the-job training is usually provided for occupations (such as short work demonstration or on-the-job training or no formal educational requirements).

[2] Average earnings for all individuals included in the studies. The average was calculated including participants who reported $0 earnings during that year.

[3]Earnings for 2006-2008 participants have been adjusted by the Consumer Price Index published by Statistics Canada, using 2002 as the base year.

Table B2. Incremental Impacts for Skills Training – Active Claimants

Indicators	In-program period		Post-program period						Total in- and post-program
	Program start year	Additional Year	1st year	2nd year	3rd year	4th year	5th year	Total post	
ALL ACTIVE CLAIMANTS									
2002-2005 participants (n= 2,089)									
Employment earnings ($)	-3,876***	-3,975***	1,943***	4,797***	6,837***	8,329***	9,864***	31,770***	23,919***
Incidence of employment (percentage points)	-0.7	0.3	4.9***	5.4***	5.6***	5.4***	6.8***	N/a	N/a
EI benefits ($)	1,247***	293***	-464***	-294***	-298***	-197**	-339***	-1,585***	-44
EI weeks (weeks)	4.8***	1.1***	-1.5***	-1.0***	-0.8***	-0.6**	-0.9***	-4.6***	1.3
Social Assistance benefits ($)	50*	79**	49	20	-16	-22	-37	-5	123
Dependence on income support (percentage points)	11.6***	6.1***	-2.8***	-1.6***	-1.6***	-1.1*	-2.3***	N/a	N/a
2006-2008 participants (n=1,375)									
Employment earnings ($)	-5,486***	-3,087***	2,299***	5,189***	6,961***	N/a	N/a	14,517***	5,995***
Incidence of employment (percentage points)	-1.1	4.0***	5.8***	6.4***	6.5***	N/a	N/a	N/a	N/a
EI benefits ($)	1,739***	276**	-401***	-223**	83	N/a	N/a	-541**	1,474***
EI weeks (weeks)	5.2***	0.7**	-1.0***	-0.7***	0.1	N/a	N/a	-1.6**	4.3***
Social Assistance benefits ($)	17	-91**	-98**	-166***	-233***	N/a	N/a	-497***	-571***
Dependence on income support (percentage points)	10.8***	1.4	-3.7***	-3.7***	-2.6***	N/a	N/a	N/a	N/a
SUB-GROUPS OF ACTIVE CLAIMANTS									
Youth (below 30 years old) – 2002-2005 participants (n=1,089)									
Employment earnings ($)	-3,891***	-5,138***	1,333**	2,727***	6,466***	8,267***	9,514***	28,306***	19,277***
Incidence of employment (percentage points)	-0.8	0.4	4.8***	3.9***	3.6***	3.0**	4.2***	N/a	N/a
EI benefits ($)	1,248***	491***	-404***	-274**	-295***	-280**	-254**	-1,507***	232
EI weeks (weeks)	5***	1.8***	-1.2***	-0.8**	-0.7**	-0.8**	-0.7*	-4.1***	2.7*
Social Assistance benefits ($)	90***	97***	26	45	20	-25	-38	29	216
Dependence on income support (percentage points)	12.7***	6.6***	-1.5**	-0.6	0.1	-0.1	-0.5	N/a	N/a
Long-Tenured Workers - 2007-2009 participants (n=801)									
Employment earnings ($)	-7,242***	-3,435***	-290	2,558*	3,161**	N/a	N/a	5,428	-5,249
Incidence of employment (percentage points)	-0.5	2.1	1.2	2.1	1.5	N/a	N/a	N/A	N/A
EI benefits ($)	2,325***	1,156***	-35	-182	-60	N/a	N/a	-278	3,203***
EI weeks (weeks)	5.5***	2.8***	-0.4	-0.5	-0.3	N/a	N/a	-1.1	7.1***
Social Assistance benefits ($)	-8	-140***	-81**	-71	-101**	N/a	N/a	-252**	-400***
Dependence on income support (percentage points)	10.5***	4.8***	-0.9	-2.9**	-0.8	N/a	N/a	N/A	N/A

Significance level *** 1%; ** 5%; * 10%

Table B3. Incremental Impacts for Skills Training – Former Claimants

Indicators	In-program period		Post-program period						Total in- and post-program
	Program start year	Additional Year	1st year	2nd year	3rd year	4th year	5th year	Total post	
All Former Claimants									
2002-2005 participants (n= 642)									
Employment earnings ($)	-1,006**	-1,225**	2,399***	4,509***	5,247***	5,461***	6,771***	24,386***	22,155***
Incidence of employment (percentage points)	-3.8**	1.7	5.1***	8.2***	7.5***	8.0***	8.6***	N/a	N/a
EI benefits ($)	345***	420**	144	89	262*	408***	-1	902**	1,667**
EI weeks (weeks)	1.4***	1.4***	0.7	0.5	1.1**	1.2***	0.2	3.6**	6.4***
Social Assistance benefits ($)	-429***	-496***	-316***	-295	-387***	-403***	-388***	-1,789***	-2,714***
Dependence on income support (percentage points)	1.3	-0.4	-2.3	-2.7**	-2.1	-0.8	-3.2**	N/A	N/A
2006-2008 Participants (n=514)									
Employment earnings ($)	-2,905***	-1,947***	4,115***	5,277***	7,592***	N/a	N/a	16,985***	12,136***
Incidence of employment (percentage points)	-4.8**	3.1*	7.6***	6.3***	8.7***	N/a	N/a	N/a	N/a
EI benefits ($)	672***	224	-131	206	89	N/a	N/a	165	1,061**
EI weeks (weeks)	2.1***	0.6	-0.6	0.6	0.1	N/a	N/a	0.1	2.8
Social Assistance benefits ($)	-425***	-375***	-420***	-496***	-460***	N/a	N/a	-1,374***	-2,174***
Dependence on income support (percentage points)	2.1	-2.1	-7.4***	-4.2***	-3.3**	N/a	N/a	N/a	N/a
Sub-Groups of Former Claimants									
Youth (below 30 years old) – 2002-2005 participants (n=297)									
Employment earnings ($)	-1,863***	-2,168***	1,320	2,802**	3,832***	4,264***	4,551**	16,768***	12,736*
Incidence of employment (percentage points)	-6.9**	2.5	4.6*	5.3**	4.0	3.6	3.8	N/A	N/A
EI benefits ($)	439**	407**	281	49	198	124	-167	485	1,331
EI weeks (weeks)	1.8**	1.0	0.4	0.2	0.8	0.4	-0.4	1.5	4.3
Social Assistance benefits ($)	-336**	-312**	-186	-23	-81	-102	3	-389	-1,037
Dependence on income support (percentage points)	4.5*	1.3	-0.5	1.0	2.4	1.2	1.2	N/A	N/A

Significance level *** 1%; ** 5%; * 10%

Table B4. Cost-Benefit Results from the Social Perspective for Skills Training

Total Costs and Benefits Over Participation Period (2 years) and 6 Years Post-program	Active Claimants (n=2,089)	Former Claimants (n=642)
Program cost	-$5,410	-$5,460
Marginal social costs of public funds	$150	-$74
Employment earnings	$25,570	$22,742
Fringe benefit	$3,835	$3,411
Net present value (By how much do the benefits exceed the costs 6 years after participation?)	**$24,145**	**$20,619**
Cost-benefit ratio (How much does it cost in EI part II funds to achieve $1 in benefit 6 years after participation?)	**$0.20**	**$0.20**
Payback period (How many years after participation would it take for the benefits to recover the costs?)	**3.2 years after participation**	**2.4 years after program end**

Appendix C – Detailed Results Skills Training – Apprenticeship

Table C1. Socio-Demographic and Labour Market Characteristics of Skills Training – Apprenticeship Participants

	Active Claimants		Former Claimants	
	2003 to 2005	2013 to 2014	2003 to 2005	2013 to 2014
Number of observations	1,709	284	244	75
Gender				
Male	92%	92%	91%	88%
Female	8%	8%	9%	9%
Age				
Under 25	53%	17%	32%	7%
25-34	31%	52%	44%	44%
35-44	10%	24%	16%	31%
45-54	5%	6%	7%	11%
55 and over	1%	1%	0%	8%
Skills level related to National Occupation Code associated with the last EI claim opened before Skills Training – Apprenticeship participation[1]				
Managerial	1%	0%	1%	7%
University	1%	0%	1%	1%
College or apprenticeship training	81%	94%	58%	61%
Secondary school or occupational training	10%	1%	18%	17%
On-the-job training	7%	5%	23%	13%
Key Labour Market Indicators In the Year Preceding the Start of Participation				
Earnings including $0[2]	$23,994	$36,768[3]	$25,786	$30,289[3]
Proportion Employed	100%	100%	99%	99%
Proportion on Employment Insurance	21%	24%	44%	38%
Proportion on Social Assistance	3%	3%	2%	9%

Proportions may not add up to 100% due to rounding

[1]Skill level corresponds to the type and/or amount of training or education typically required to work in the last occupation participants had before opening the last EI claim they had before participating in EBSMs:

-Managerial: Management occupations

-University: Occupations usually requiring university education (for example, university degree at the bachelor's, master's or doctorate level)

-College or apprenticeship training: Occupations usually requiring college or vocational education or apprenticeship training such as 2 to 3 years of post-secondary education at a community college, institute of technology or CEGEP or 2 to 5 years of apprenticeship training or 3 to 4 years of secondary school and more than 2 years of on-the-job training, specialized training courses or specific work experience and/or occupations with supervisory responsibilities and occupations with significant health and safety responsibilities, such as firefighters, police officers and registered nursing assistants.

- Secondary or occupational training: Occupations usually requiring secondary school and/or occupation-specific training such as one to four years of secondary school education or up to 2 years of on-the-job training specialized training courses or specific work experience.

-On-the-job training: On-the-job training is usually provided for occupations (such as short work demonstration or on-the-job training or no formal educational requirements).

[2] The average was calculated including participants who reported $0 earnings during that year.

[3]Earnings for 2006-2008 participants have been adjusted by the Consumer Price Index published by Statistics Canada, using 2002 as the base year.

Table C2. Labour Market Outcomes for Active Claimants who began participation in Skills Training – Apprenticeship in 2003–2005

Average outcomes	Pre-program period					After the Program Start Year							
	5 year pre	4 year pre	3 year pre	2 year pre	1 year pre	Program start year	1 year	2 year	3 year	4year	5 year	6 year	7 year
Earnings including $0	15,325	17,311	19,459	22,673	26,644	24,408	30,746	38,443	45,472	51,624	55,055	58,763	62,178
Earnings excluding $0[1]	16,121	17,877	20,297	22,976	26,688	24,569	31,368	39,625	47,198	54,736	58,542	62,777	66,034
Proportion employed	95%	97%	96%	99%	100%	99%	98%	97%	96%	94%	94%	94%	94%
Proportion on EI	19%	22%	24%	23%	25%	99%	71%	51%	40%	24%	18%	16%	14%
EI benefits	711	894	910	849	906	3,780	2,615	1,893	1,545	1,001	759	873	696
Number of weeks on EI	2.62	3.04	3.14	2.77	2.91	12.34	7.9	5.29	4.06	2.59	1.96	2.15	1.56
Proportion on Social Assistance	5%	5%	5%	4%	3%	3%	2%	3%	2%	2%	2%	2%	2%
Social Assistance benefits	148	161	138	107	79	63	78	96	70	53	72	90	80
Dependence on income support	6%	7%	6%	5%	4%	17%	11%	7%	5%	4%	4%	4%	3%
Proportion self employed	14%	15%	14%	14%	15%	16%	17%	17%	18%	19%	19%	19%	20%

[1]Earnings outcomes excluding individuals who reported no earnings in a given year.
n=1,232

Table C3. Labour Market Outcomes for Former Claimants who began participation in Skills Training – Apprenticeship in 2003–2005

Average outcomes	Pre-program period					After the Program Start Year							
	5 year pre	4 year pre	3 year pre	2 year pre	1 year pre	Program start year	1 year	2 year	3 year	4year	5 year	6 year	7 year
Earnings including $0	18,534	21,153	21,419	24,866	27,211	29,632	34,771	40,162	47,679	53,656	55,463	60,604	67,407
Earnings excluding $0[1]	19,372	21,679	22,276	25,351	27,344	30,222	35,994	40,978	48,883	54,740	57,738	64,514	70,104
Proportion employed	96%	98%	96%	98%	100%	98%	97%	98%	98%	98%	96%	94%	96%
Proportion on EI	25%	33%	48%	45%	44%	43%	38%	34%	32%	30%	20%	19%	16%
EI benefits ($)	971	1,187	1,719	1,574	1,888	1,396	1,389	1,454	1,433	1,448	1,172	1,100	937
Number of weeks on EI	3.38	3.91	5.79	5.08	6.12	4.74	4.2	3.97	3.96	3.88	2.85	2.63	2.58
Proportion on Social Assistance	5%	7%	8%	6%	3%	7%	5%	6%	5%	3%	2%	2%	2%
Social Assistance benefits ($)	274	276	191	150	38	201	141	128	196	80	40	40	38
Dependence on income support	9%	8%	11%	9%	9%	9%	7%	5%	5%	5%	4%	4%	3%
Proportion self employed	14%	19%	17%	17%	18%	17%	16%	15%	19%	22%	17%	18%	22%

[1]Earnings outcomes excluding individuals who reported no earnings in a given year.
n=210

Appendix D- Detailed Results Targeted Wage Subsidies

Table D1. Socio-Demographic and Labour Market Characteristics of Targeted Wage Subsidies Participants

	Active Claimants		Former Claimants	
	2002-2005	2006-2008	2002-2005	2006-2008
Number of observations	378	223	1,446	555
Gender				
Male	47%	54%	52%	56%
Female	53%	45%	48%	44%
Age				
Under 25	18%	10%	20%	18%
25-34	36%	32%	37%	40%
35-44	26%	23%	25%	21%
45-54	15%	23%	14%	14%
55 and over	5%	12%	4%	7%
Marital Status				
Married or common law	37%	44%	35%	35%
Widow/ divorced or separated	13%	12%	13%	11%
Single	47%	41%	49%	50%
Missing data / Unknown	3%	3%	3%	5%
Skills level related to National Occupation Code associated with the last EI claim opened before Targeted Wage Subsidies participation[1]				
Managerial	6%	14%	7%	6%
University	7%	7%	5%	6%
College or apprenticeship training	28%	23%	25%	28%
Secondary or occupational training	32%	41%	35%	35%
On-the-job training	27%	14%	28%	25%
Key Labour Market Indicators In the Year Preceding the Start of Participation				
Earnings[2]	$17,276	$20,969[3]	$10,671	$14,330[3]
Proportion Employed	98%	98%	86%	93%
Proportion on Employment Insurance	49%	47%	50%	55%
Proportion on Social Assistance	16%	10%	22%	17%

Proportions may not add up to 100% due to rounding

[1]Skill level corresponds to the type and/or amount of training or education typically required to work in the last occupation participants had before opening the last EI claim they had before participating in EBSMs:

-Managerial: Management occupations

-University: Occupations usually requiring university education (for example, university degree at the bachelor's, master's or doctorate level)

-College or apprenticeship training: Occupations usually requiring college or vocational education or apprenticeship training such as 2 to 3 years of post-secondary education at a community college, institute of technology or CEGEP or 2 to 5 years of apprenticeship training or 3 to 4 years of secondary school and more than 2 years of on-the-job training, specialized training courses or specific work experience and/or occupations with supervisory responsibilities and occupations with significant health and safety responsibilities, such as firefighters, police officers and registered nursing assistants.

- Secondary or occupational training: Occupations usually requiring secondary school and/or occupation-specific training such as one to four years of secondary school education or up to 2 years of on-the-job training specialized training courses or specific work experience.

-On-the-job training: On-the-job training is usually provided for occupations (such as short work demonstration or on-the-job training *or no* formal educational requirements).

[2] Average earnings for all individuals included in the studies. The average was calculated including participants who reported $0 earnings during that year.

[3]Earnings for 2006-2008 participants have been adjusted by the Consumer Price Index published by Statistics Canada, using 2002 as the base year.

Table D2. Incremental Impacts for Targeted Wage Subsidies – Active Claimants

Indicators	In-program period		Post-program period						Total in- and post-program
	Program start year	Additional Year	1st year	2nd year	3rd year	4th year	5th year	Total post	
ACTIVE CLAIMANTS									
2002-2005 Participants (n=378)									
Employment earnings ($)	-90	753	941	-1,094	-573	-696	-281	-1,702	-1,039
Incidence of employment (percentage points)	6.9***	5.7***	4.8**	2.8	0.4	-0.5	2.7	N/a	N/a
EI benefits ($)	-638***	-363*	-117	237*	81	37	-219*	19	-982*
EI weeks (weeks)	-1.0*	0.2	0.1	1.0*	0.2	0.3	-0.4	1.3	0.4
Social Assistance benefits ($)	-119	-116	-157	-195*	-195*	-173	-127	-848	-1,083
Dependence on income support (percentage points)	-3.8**	-1.2	1.2	3*	2.1	1.9	0.6	N/a	N/a

Significance level *** 1%; ** 5%; * 10%

Table D3. Incremental Impacts for Targeted Wage Subsidies – Former Claimants

Indicators	In-program period		Post-program period						Total in- and post-program
	Program start year	Additional Year	1st year	2nd year	3rd year	4th year	5th year	Total post	
FORMER CLAIMANTS									
2002-2005 Participants (n=1,446)									
Employment earnings ($)	3,867***	4,030***	3,036***	3,090***	2,778***	2,839***	3,467***	15,210***	23,107***
Incidence of employment (percentage points)	14.3***	12.0***	6.9***	7.2***	6.0***	6.8***	8.0***	N/a	N/a
EI benefits ($)	35	565***	430***	355***	305***	158*	106	1,353***	1,954***
EI weeks (weeks)	0.7**	2.8***	1.8***	1.3***	1.1***	0.5	0.4	5.1***	8.6***
Social Assistance benefits ($)	-522***	-598***	-455***	-299***	-279***	-249***	-341***	-1,623***	-2,743***
Dependence on income support (percentage points)	-12.0***	-4.0***	-1.2	-1.7**	-0.4	-2.1**	-2.4**	N/a	N/a
2006-2008 Participants (n=555)									
Employment earnings ($)	4,341***	3,992***	4,596***	3,614***	4,049***	N/a	N/a	12,270***	20,585***
Incidence of employment (percentage points)	10.3***	7.7***	8.9***	7.3***	6.2***	N/a	N/a	N/a	N/a
EI benefits ($)	-46	333**	163	457**	256	N/a	N/a	876**	1,164*
EI weeks (weeks)	-0.2	1.4**	0.2	1.0*	0.7	N/a	N/a	2.0	3.2
Social Assistance benefits ($)	-892***	-919***	-775***	-853***	-707***	N/a	N/a	-2,334***	-4,145***
Dependence on income support (percentage points)	-11.0***	-4.2***	-4.7***	-2.6*	-1.8	N/a	N/a	N/a	N/a

Significance level *** 1%; ** 5%; * 10%

Table D4. Cost-Benefit Results from the Social Perspective for Targeted Wage Subsidies

Total Costs and Benefits Over Participation Period (2 years) and 6 Years Post-program	ACTIVE CLAIMANTS (n=378)	FORMER CLAIMANTS (n=1,446)
Program cost	-$5,306	-$4,480
Marginal social costs of public funds	-$661	$22
Employment earnings	-$640	$22,029
Fringe benefit	-$96	$3,304
Net present value (By how much do the benefits exceed the costs 6 years after participation?)	**-$6,702**	**$20,876**
Cost-benefit ratio (How much does it cost in EI part II funds to achieve $1 in benefit 6 years after participation?)	**Negative benefits**	**$0.20**
Payback period (How many years after participation would it take for the benefits to recover the costs?)	**Costs may never be recovered**	**Second participation year**

Appendix E- Detailed Results Self-Employment

Table E1. Socio-Demographic and Labour Market Characteristics of Self-Employment Participants

	Active Claimants		Former Claimants
	2002-2005	2006-2008	2002-2005
Number of observations	250	83	74
Gender			
Male	63%	60%	51%
Female	37%	40%	49%
Age			
Under 25	3%	6%	7%
25-34	32%	28%	24%
35-44	28%	30%	42%
45-54	30%	30%	23%
55 and over	7%	6%	4%
Marital Status			
Married or common law	67%	65%	55%
Widow/ divorced or separated	12%	6%	22%
Single	19%	29%	19%
Missing data / Unknown	2%	0%	4%
Skills level related to National Occupation Code associated with the last EI claim opened before Self-Employment participation[1]			
Managerial	11%	16%	11%
University	12%	12%	16%
College or apprenticeship training	42%	29%	23%
Secondary or occupational training	28%	35%	31%
On-the-job training	7%	8%	19%
Key Labour Market Indicators In the Year Preceding the start of Participation			
Earnings[2]	$29,257	$27,142[3]	$10,464
Proportion Employed	97%	100%	81%
Proportion on Employment Insurance	36%	41%	55%
Proportion on Social Assistance	4%	2%	24%

Proportions may not add up to 100% due to rounding

[1]Skill level corresponds to the type and/or amount of training or education typically required to work in the last occupation participants had before opening the last EI claim they had before participating in EBSMs:

-Managerial: Management occupations

-University: Occupations usually requiring university education (for example, university degree at the bachelor's, master's or doctorate level)

-College or apprenticeship training: Occupations usually requiring college or vocational education or apprenticeship training such as 2 to 3 years of post-secondary education at a community college, institute of technology or CEGEP or 2 to 5 years of apprenticeship training or 3 to 4 years of secondary school and more than 2 years of on-the-job training, specialized training courses or specific work experience and/or occupations with supervisory responsibilities and occupations with significant health and safety responsibilities, such as firefighters, police officers and registered nursing assistants.

- Secondary or occupational training: Occupations usually requiring secondary school and/or occupation-specific training such as one to four years of secondary school education or up to 2 years of on-the-job training specialized training courses or specific work experience.

-On-the-job training: On-the-job training is usually provided for occupations (such as short work demonstration or on-the-job training *or n*o formal educational requirements).

[2] Average earnings for all individuals included in the studies. The average was calculated including participants who reported $0 earnings during that year.

[3]Earnings for 2006-2008 participants have been adjusted by the Consumer Price Index published by Statistics Canada, using 2002 as the base year.

Table E2. Labour Market Outcomes for Self-Employment – Active Claimants

Average outcomes	Pre-program period					Program period		Post-program period					Average annual outcomes pre-[1]	Average annual outcomes post-[2]	Change[3]
	5 yrs pre	4 yrs pre	3 yrs pre	2 yrs pre	1 yr pre	Program start year	1 yr post start year	1 yr post	2 yrs post	3 yrs post	4 yrs post	5 yrs post			
All active claimants (n=250)															
Earnings including $0[4]	19,413	21,790	23,919	25,753	29,257	13,970	11,385	16,988	18,992	22,883	24,272	24,931	24,026	21,613	-2,413
Earnings excluding $0[5]	22,275	24,775	26,459	27,632	30,100	15,592	16,453	23,335	25,122	30,593	32,801	35,213	26,248	29,413	3,165
Proportion employed	87%	88%	90%	93%	97%	90%	69%	73%	76%	75%	74%	71%	91%	74%	-17 pp
Proportion on EI	22%	22%	20%	24%	36%	97%	52%	13%	14%	13%	13%	12%	25%	13%	-12 pp
EI benefits ($)	903	744	851	1,055	1,441	7,522	2,903	702	753	848	898	808	999	802	-197
Number of weeks on EI	3.3	2.8	3.1	3.6	5.1	23.4	8.7	2.1	2.3	2.3	2.3	2.1	3.6	2.3	-1.3
Proportion on Social Assistance	7%	6%	5%	6%	4%	4%	4%	5%	5%	4%	4%	3%	5%	4%	-1 pp
Social Assistance benefits ($)	290	243	179	131	81	79	98	111	146	107	183	169	185	143	-42
Dependence on income support	10%	8%	8%	7%	8%	44%	32%	6%	6%	5%	7%	6%	8%	6%	-2 pp

[1]Average annual outcome pre-: Represents the average annual outcomes over the pre-participation period
[2]Average annual outcome post-: Represents the average annual outcomes over the post-participation period
[3]Change between pre- and post-: Represents the difference between the average annual outcome calculated over the pre-/post-participation periods.
[4]Earnings outcome for all individuals covered by the study.
[5]Earnings outcomes excluding individuals who reported no earnings in a given year.
pp: percentage points

Table E3. Labour Market Outcomes for Self-Employment – Former Claimants

Average outcomes	Pre-program period					Program period		Post-program period					Average annual outcomes pre-	Average annual outcomes post-	Change
	5 yrs pre	4 yrs pre	3 yrs pre	2 yrs pre	1 yr pre	Program start year	1 yr post start year	1 yr post	2 yrs post	3 yrs post	4 yrs post	5 yrs post			
All former claimants (n=74)															
Earnings including $0	13,886	17,808	17,441	16,545	10,464	5,540	5,535	10,064	15,075	17,076	18,649	20,316	15,229	16,236	1,007
Earnings excluding $0	16,945	19,668	19,856	17,744	12,905	8,540	10,240	16,926	23,736	26,885	27,059	29,478	17,424	24,817	7,393
Proportion employed	80%	91%	88%	93%	81%	65%	54%	60%	64%	64%	69%	69%	87%	65%	-22 pp
Proportion on EI	24%	23%	38%	42%	55%	42%	10%	10%	14%	22%	30%	23%	37%	20%	-17 pp
EI benefits ($)	1,299	871	2,119	2,107	3,663	2,260	604	336	563	1,478	1,992	1,413	2,012	1,156	-856
Number of weeks on EI	4.7	2.8	8.2	7.4	11.9	7.3	1.8	1.2	1.7	4.4	5.8	4.0	7.0	3.4	-3.6
Proportion on Social Assistance	22%	22%	14%	16%	24%	26%	19%	15%	14%	14%	15%	16%	20%	15%	-5 pp
Social Assistance benefits ($)	810	788	603	629	1,287	736	751	783	572	696	778	822	823	730	-93
Dependence on income support	21%	12%	22%	22%	38%	43%	17%	11%	13%	17%	17%	16%	23%	15%	-8 pp

Appendix F - Detailed Results Workforce Development

Table F1. Socio-Demographic and Labour Market Characteristics of Workforce Development Participants

	Active Claimants		Former Claimants	
	2002-2005	2006-2008	2002-2005	2006-2008
Number of observations	7,576	5,269	7,306	5,674
Gender				
Male	61%	61%	59%	55%
Female	39%	39%	41%	45%
Age				
Under 25	19%	15%	15%	14%
25-34	32%	30%	33%	35%
35-44	26%	26%	29%	27%
45-54	18%	21%	18%	19%
55 and over	5%	7%	5%	5%
Marital Status				
Married or common law	40%	39%	29%	24%
Widow/ divorced or separated	14%	13%	16%	16%
Single	43%	44%	49%	53%
Missing data / Unknown	3%	4%	6%	7%
Skills level related to National Occupation Code associated with the last EI claim opened before Workforce Development participation[1]				
Managerial	6%	6%	5%	5%
University	6%	4%	5%	4%
College or apprenticeship training	28%	25%	24%	24%
Secondary or occupational training	36%	40%	35%	38%
On-the-job training	24%	25%	31%	30%
Key Labour Market Indicators In the Year Preceding the start of Participation				
Earnings[2]	$20,126	$21,580[3]	$9,286	$11,637[3]
Proportion Employed	98%	99%	80%	87%
Proportion on Employment Insurance	45%	46%	51%	51%
Proportion on Social Assistance	12%	14%	32%	31%

Proportions may not add up to 100% due to rounding

[1]Skill level corresponds to the type and/or amount of training or education typically required to work in the last occupation participants had before opening the last EI claim they had before participating in EBSMs:

-Managerial: Management occupations

-University: Occupations usually requiring university education (for example, university degree at the bachelor's, master's or doctorate level)

-College or apprenticeship training: Occupations usually requiring college or vocational education or apprenticeship training such as 2 to 3 years of post-secondary education at a community college, institute of technology or CEGEP or 2 to 5 years of apprenticeship training or 3 to 4 years of secondary school and more than 2 years of on-the-job training, specialized training courses or specific work experience and/or occupations with supervisory responsibilities and occupations with significant health and safety responsibilities, such as firefighters, police officers and registered nursing assistants.

- Secondary or occupational training: Occupations usually requiring secondary school and/or occupation-specific training such as one to four years of secondary school education or up to 2 years of on-the-job training specialized training courses or specific work experience.

-On-the-job training: On-the-job training is usually provided for occupations (such as short work demonstration or on-the-job training *or no* formal educational requirements).

[2] Average earnings for all individuals included in the studies. The average was calculated including participants who reported $0 earnings during that year.

[3]Earnings for 2006-2008 participants have been adjusted by the Consumer Price Index published by Statistics Canada, using 2002 as the base year.

Table F2. Incremental Impacts for Workforce Development

Indicators	In-program period	Post-program period						Total in- and post-program
		1st year	2nd year	3rd year	4th year	5th year	Total post	
ACTIVE CLAIMANTS								
2002-2005 Participants (n=7,576)								
Employment earnings ($)	-2,247***	-446*	710***	1,169***	1,831***	2,074***	5,337***	3,090**
Incidence of employment (percentage points)	-0.4	-0.1	0.5	1.1*	1.1*	1.6**	N/a	N/a
EI benefits ($)	518***	-530***	-423***	-303***	-248***	-190***	-1,696***	-1,178***
EI weeks (weeks)	2.1***	-1.8***	-1.3***	-0.9***	-0.8***	-0.6***	-5.3***	-3.3***
Social Assistance benefits ($)	49**	122***	26	13	-56**	-34	71	120
Dependence on income support (percentage points)	5.1***	-1.5***	-1.9***	-1.5***	-1.8***	-1.5***	N/a	N/a
2006-2008 Participants (n=5,269)								
Employment earnings ($)	-2,740***	-371	731**	1,381***	N/a	N/a	1,741**	-999
Incidence of employment (percentage points)	1.3**	1.9***	2.1***	0.9	N/a	N/a	N/a	N/a
EI benefits ($)	607***	-442***	-332***	-278***	N/a	N/a	-1,052***	-445**
EI weeks (weeks)	1.7***	-1.3***	-1.0***	-0.8***	N/a	N/a	-3.1***	-1.4**
Social Assistance benefits ($)	145***	199***	134***	103***	N/a	N/a	436***	581***
Dependence on income support (percentage points)	4.3***	-0.2	-0.8	-0.7	N/a	N/a	N/a	N/a
SUB-GROUPS OF ACTIVE CLAIMANTS								
Youth (below 30 years old) – 2002-2005 participants (n=2,804)								
Employment earnings ($)	-1,945***	83	1,134***	1,519**	2,032***	2,709***	7,476***	5,532***
Incidence of employment (percentage points)	-0.6	0.2	1.2	2.0**	1.0	1.1	N/A	N/A
EI benefits ($)	302***	-708***	-433***	-362***	-233***	-238***	-1,974***	-1,671***
EI weeks (weeks)	1.5***	-2.4***	-1.2***	-1.0***	-0.6***	-0.6***	-5.8***	-4.3***
Social Assistance benefits ($)	96***	152***	52*	13	-48	-27	143	239*
Dependence on income support (percentage points)	4.4***	-2.9***	-2.2***	-1.9***	-1.4***	-1.7***	N/A	N/A
Older workers (55 years old and over) – 2002-2005 participants (n=399)								
Employment earnings ($)	-3,214***	-1,541	494	2,732**	3,377**	3,384**	8,445	5,231
Incidence of employment (percentage points)	-1.5	-1.4	1.5	4.6	9.0***	7.4**	N/A	N/A
EI benefits ($)	995***	-436*	-346*	-186	38	221	-709	286
EI weeks (weeks)	3.8***	-1.4*	-0.9	0.0	0.5	1.0	-0.7	3.0
Social Assistance benefits ($)	-4	77	136*	56	35	73	376	373
Dependence on income support (percentage points)	8.9***	-3.1	-1.5	-3.1*	-0.4	2.4	N/A	N/A
Long-Tenured workers- 2007-2009 participants (n=1,045)								
Employment earnings ($)	-3,520***	-2,397***	-2,048*	-501	N/a	N/a	-4,947*	-8,467***
Incidence of employment (percentage points)	-0.4	-0.9	-1.3	-0.8	N/a	N/a	N/A	N/A
EI benefits ($)	778***	104	-286	-423	N/a	N/a	-605	173
EI weeks (weeks)	1.8***	0.0	-0.8*	-1.2***	N/a	N/a	-2.0*	-0.2
Social Assistance benefits ($)	131***	150***	117**	89*	N/a	N/a	357***	488***
Dependence on income support (percentage points)	5.3***	1.5	-0.6	-0.9	N/a	N/a	N/A	N/A

Significance level *** 1%; ** 5%; * 10%

Table F3. Incremental Impacts Related to the Timing of Participation in Workforce Development

Cohorts	n=	In-program	Post-program period					Total impact post-program	Total impact in- and post-program
			1 year	2 years	3 years	4 years	5 years		
Employment Earnings ($)									
1–4 weeks	1,837	-520***	347	2,345***	3,455***	4,490***	4,762***	15,399***	14,880***
5–8 weeks	1,074	-1,429***	309	2,266***	2,883***	3,697***	3,988***	13,144***	11,715***
9–12 weeks	816	-1,717***	1,338**	2,038***	2,833***	3,853***	4,758***	14,820***	13,103***
2nd quarter	1,654	-3,352***	-50	942	1,648***	2,229***	3,073***	7,841***	4,490*
3rd quarter	853	-6,093***	-273	-82	-47	1,178	1,452	2,228	-3,864
4th quarter	529	-5,778***	384	1,002	1,329	2,107	2,322*	7,144*	1,366
Incidence of Employment (percentage points)									
1–4 weeks	1,837	2.2***	0.0	0.3	1.2	1.1	1.1	N/a	N/a
5–8 weeks	1,074	1.1	0.3	-0.4	0.0	-0.2	-1.8	N/a	N/a
9–12 weeks	816	1.6*	0.8	-0.2	2.4*	0.9	2.3	N/a	N/a
2nd quarter	1,654	-1.2	-0.9	0.6	0.9	1.5	1.4	N/a	N/a
3rd quarter	853	-5.7***	-3.6***	-2.4**	-2.1	-0.2	-0.7	N/a	N/a
4th quarter	529	-8.2***	-0.8	-1.9	-0.6	-0.9	0.2	N/a	N/a
EI Benefits ($)									
1–4 weeks	1,837	193**	-74	-328***	-276***	-181***	-145*	-1,004***	-810***
5–8 weeks	1,074	875***	-313***	-478***	-346***	-352***	-228***	-1,717***	-842**
9–12 weeks	816	876***	-671***	-360***	-347***	-345***	-243**	-1,966***	-1,090**
2nd quarter	1,654	1,247***	-870***	-477***	-288***	-234***	-208**	-2,077***	-829**
3rd quarter	853	1,677***	-1,747***	-440***	-334***	-210*	-181	-2,913***	-1,235**
4th quarter	529	984***	-2,291***	-829***	-452**	-327*	-351*	-4,249***	-3,265*

* Significant at 10%; ** significant at 5%; *** significant at 1%

n= refers to the number of participants. It corresponds to 100% of participants.

Note: For the estimations we have selected a 50% random sample among comparison group in each cohort due to their large number. We used 100% of participants.

Table F4. Incremental Time of Return to Employment for Workforce Development Participants Based on Timing of Participation

Cohorts (start of EAS-only after start of an EI claim)	1-4 Weeks (N=1,837)	5-8 Weeks (N=1,074)	9-12 Weeks (N=816)	2nd Quarter (N=1,654)	3rd Quarter (N=853)	4th Quarter (N=529)
Time of Return to Employment	2.3***	-0.7*	-1.1***	-2.7***	-2.9***	-1.5***

** Significant at 10%; ** significant at 5%; *** significant at 1%*

Note that, for the estimations we have selected 50% random sample, in each cohort, among comparison group due to their large number. We used 100% of participants.

Note: The means of the standardized bias reduction after matching was calculated as suggested by Rosenbaum and Rubin (1985). The overall bias after matching lies between 3% and 15% which is generally considered as acceptable in empirical research papers.

Table F5. Cost-Benefit Results from the Social Perspective for Workforce Development

Total Costs and Benefits Over Participation Period (1 year) and 6 Years Post-program	Active Claimants (n=7,576)
Program cost	-336
Marginal social costs of public funds	347
Employment earnings	4,120
Fringe benefit	618
Net present value (By how much do the benefits exceed the costs within 6 years after participation?)	**4,749**
Cost-benefit ratio (How much does it cost in EI part II funds to achieve $1 in benefit 6 years after participation?)	**0.10**
Payback period (How many years after participation would it take for the benefits to recover the costs?)	**3.8 years after participation**

Appendix G – List of Studies Included in the Synthesis Report

Table G1. Overview of Studies Included in this Summary Report

Study	Evidence generated	Methods	Reference period	Observation period
Profile, Outcomes and Net Impacts of Employment Benefits and Support Measures (EBSM) Participants in Saskatchewan (Completed in 2014)	- Incremental impacts for participants including youth and older workers - Profile and socio-demographic characteristics of participants	- Non-experimental method using propensity score matching in combination with Difference-in-Differences - Statistical profiling	2002-2005 participants	7 years between 2002 and 2011 (2 years in program and 5 years post-program)
Effects of the Timing of Participation in Employment Assistance Services in Saskatchewan (Completed in 2014)	- Incremental impacts	- Non-experimental method using propensity score matching in combination with Difference-in-Differences - Statistical profiling		
Cost-Benefit Analysis of Employment Benefits and Support Measures Delivered in Saskatchewan (Completed in 2016)	- Cost-benefit analysis	- Non-experimental method using propensity score matching in combination with Difference-in-Differences - Cost analysis		8 years between 2002 and 2013 (2 years in-program and 6 years post-program)
Analysis of EBSMs Profile, Outcomes and Incremental Impacts for 2006-2008 Participants in Saskatchewan (Completed in 2015)	- Incremental impacts - Profile and socio-demographic characteristics of participants	- Non-experimental method using propensity score matching in combination with Difference-in-Differences - Statistical profiling	2006-2008 participants	5 years between 2006 and 2012 (2 years in-program and 3 years post-program)
Analysis of EBSMs Profile, Outcomes, and Incremental Impacts for EI Claimants Category "Long-Tenured Workers" in Saskatchewan (Completed in 2016)	- Incremental impacts - Profile and socio-demographic characteristics of participants	- Non-experimental method using propensity score matching in combination with Difference-in-Differences - Statistical profiling	2007-2009 participants	5 years between 2007 and 2013 (2 years in-program and 3 years post-program)
Study on Employment Assistance Services: Saskatchewan (Completed in 2014)	- Program design and delivery - Challenges and lessons learned	- 10 key informants interviews - Literature and document review	Design and delivery at the time of the data collection (2013)	
Study on Skills Training in Saskatchewan (Completed in 2016)	- Program design and delivery - Challenges and lessons learned	- 4 key informants interviews - Literature and document review - Questionnaire completed by Saskatchewan officials	Design and delivery at the time of the data collection (2015)	
Study on Skills Training – Apprenticeship in Saskatchewan (Completed in 2016)	- Program design and delivery - Challenges and lessons learned	- 5 key informants interviews - Literature and document review - Questionnaire completed by Saskatchewan officials		